



















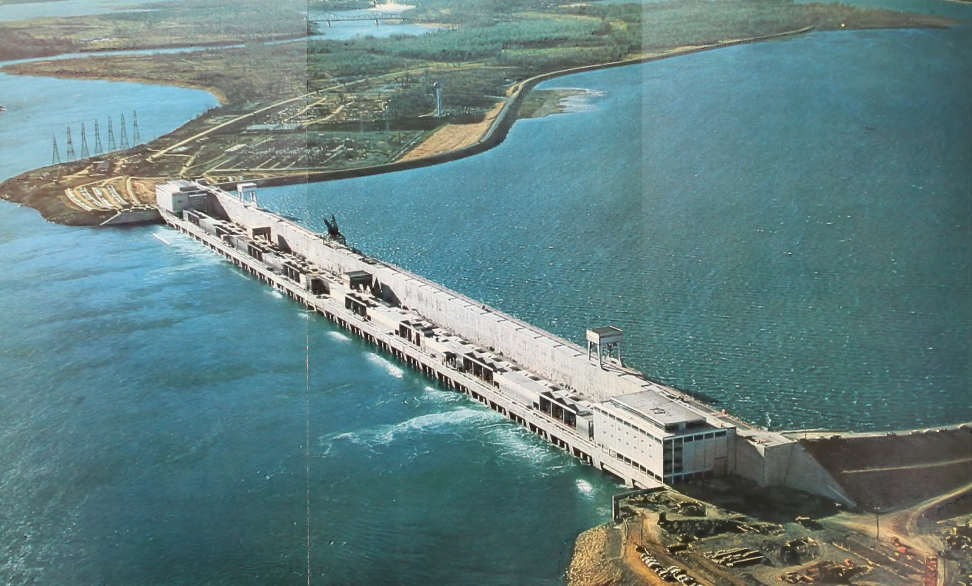




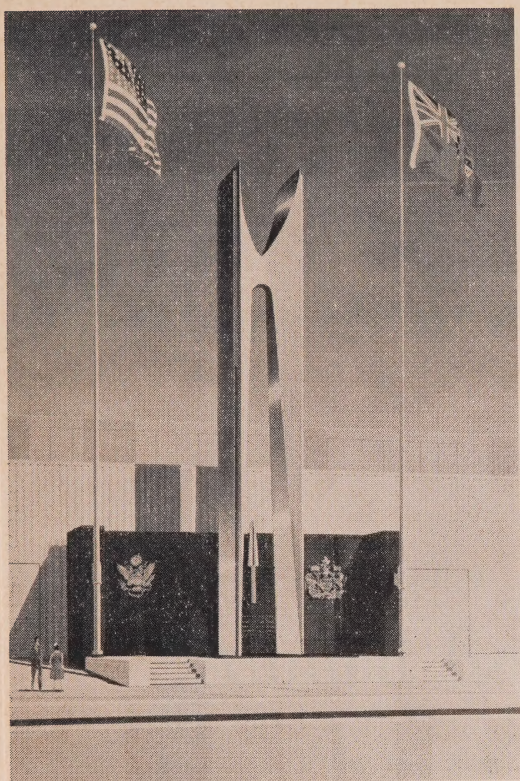
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### ST. LAWRENCE POWER PROJECT

The frontispiece opposite shows the Canadian and United States powerhouses incorporated in a single structure extending across the north channel of the river to the Canadian shore. At the international boundary, where the powerhouses meet, the monument depicted above stands as a symbol of mutual co-operation and goodwill.

Her Majesty Queen Elizabeth II, on June 27, 1959, unveiled the words of the following inscription on the base of this monument.

THIS STONE BEARS WITNESS

TO THE COMMON PURPOSE OF TWO NATIONS  
WHOSE FRONTIERS ARE THE FRONTIERS OF FRIENDSHIP,  
WHOSE WAYS ARE THE WAYS OF FREEDOM,  
AND WHOSE WORKS ARE THE WORKS OF PEACE.





(The Hydro-Electric Power Commission of Ontario

*Fifty-first*  
**Annual Report**  
*for the Year*  
**1958**

This Report is published pursuant to The Power Commission Act,  
Revised Statutes of Ontario, 1950, Chapter 281, Section 9.



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# THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

December 1958

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JAMES S. DUNCAN, C.M.G., LL.D.  
*Chairman*

W. ROSS STRIKE, Q.C.  
*1st Vice-Chairman*

HON. ROBERT W. MACAULAY, Q.C., M.L.A.  
*2nd Vice-Chairman*

LT.-COL. A. A. KENNEDY, D.S.O., E.D.  
*Commissioner*

D. P. CLIFF  
*Commissioner*

---

A. W. MANBY, B.Sc.  
*General Manager*

OTTO HOLDEN, B.A.Sc., C.E., D.Eng.  
*Chief Engineer*

ERNEST B. EASSON, B.Com.  
*Secretary*





## LETTER OF TRANSMITTAL

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TORONTO, ONTARIO, JUNE 15, 1959

THE HONOURABLE JOHN KEILLER MACKAY, D.S.O., V.D., LL.D.

*Lieutenant-Governor of Ontario*

SIR:

I have the honour to present the Annual Report of The Hydro-Electric Power Commission of Ontario for the year ended December 31, 1958.

The year under review was marked by the greatest addition to power resources in the Commission's fifty-two year history. New generating stations and extensions to existing generating stations totalled more than 800,000 kilowatts of capacity placed in service during the past year. The 1958 program of capital development amounted to approximately \$191,000,000 and represented more than one dollar in every twelve invested in new equipment and facilities in the Province during the same period. Confirmation of the need for these additional resources was evident towards the end of the year as greater demands for power and a growing confidence in the business outlook indicated increased economic activity for the months ahead.

At the beginning of 1958 there were 13 generating station projects in the Commission's capital construction program. During the year three of the new hydraulic developments, Sir Adam Beck-Niagara Generating Station No. 2, Whitedog Falls Generating Station and Caribou Falls Generating Station were completed, the Robert H. Saunders-St. Lawrence Generating Station was placed in service and the extensions to Cameron Falls, Alexander, and Manitou Falls Generating Stations were also completed. Meanwhile two new hydraulic generating stations, Otter Rapids on the Abitibi River and Red Rock Falls on the Mississagi River were added to the program and work was resumed at the Nuclear Power Demonstration Plant.

By the end of 1958 construction was in progress at five hydraulic generating stations and three conventional thermal-electric developments, namely, the Richard L. Hearn, the Lakeview and the Thunder Bay Generating Stations. Four 200,000-kilowatt units are being added to bring the installed capacity of the Richard L. Hearn Generating Station to 1,200,000 kilowatts or three times its present installation. The ultimate installed capacity foreseen for these three thermal-electric stations is 4,000,000 kilowatts, which is slightly less than the total dependable capacity of the Commission's generating resources in December 1957. The Robert H. Saunders-St. Lawrence Generating Station will be completed during 1959. The four other hydraulic developments in the process of construction are located in northern Ontario and form part of a long-range plan which will co-ordinate the development of northern hydraulic resources with the thermal-electric program and bring the power from comparatively remote stations to load centres by means of an extra-high-voltage transmission system.

Gross revenues of the Commission in 1958 amounted to \$201,259,225, which exceeded comparable revenues in 1957 by 3.0 per cent. The total cost of providing electrical service for the year under review was \$197,690,110, which was 3.2 per cent greater than the cost on a comparable basis in 1957. The amount by which energy loads of the Commission's customers in 1958 exceeded those in 1957 was more than met by increases in the amounts of energy available to the Commission from hydro-electric sources. It was therefore possible to reduce considerably the number of higher-cost kilowatt-hours used which otherwise would have been obtained from thermal-electric generating stations. The result was a substantial reduction in the cost of fuel and in other operating costs at thermal-electric stations as compared with those in 1957. The excess of revenue over cost permitted the Commission to make rebates to the cost-contract municipalities in the Southern Ontario System and the Northern Ontario Properties to the total amount of \$2,867,032.

Agreements have recently been signed with the Province relating to the payment of water rentals by the Commission. Legislation passed at the 1959 session of the Legislature amended The Power Commission Act to enable the Commission to increase payments made to municipalities in lieu of taxes on Commission properties. Beginning in 1959, the Commission will now make payments to those municipalities where there are generating and

transformer stations as well as to those where there are administration buildings. As a result of these changes the Commission's future operating costs must include the substantially increased payments made to the Provincial Government and the municipalities.

A sales promotion department has recently been established by the Commission, and the regional staffs have been expanded to provide assistance to the municipal utilities in promoting the use of electricity. In conjunction with the municipal utilities the Commission is giving strong support to the "Live Better Electrically" campaign in order to increase general knowledge on the advantages of the wide use of electricity. Particular emphasis is being placed on house heating and the benefits that will undoubtedly follow the future development of electrical devices for household use.

During 1957 the frequency standardization program was extended to include some 20,000 customers in the Northeastern Division of the Northern Ontario Properties and the equipment of these customers was standardized during the first part of 1958. By the end of the year, the frequency standardization program was nearing completion, leaving only a small area in North Toronto and in Leaside to be standardized. These areas will be completed by July 1959.

I wish, on the Commission's behalf, to express appreciation for the gracious visit made by Her Royal Highness The Princess Margaret to the Sir Adam Beck-Niagara Generating Station in August 1958. The Commission will be honoured also by Her Majesty The Queen and His Royal Highness The Prince Philip during their tour of Canada in the month of June 1959 when Her Majesty will unveil at the St. Lawrence Power Project a monument placed on the boundary between Canada and the United States and memorializing the achievement of this international co-operative undertaking.

To my fellow commissioners may I express my sincere thanks and appreciation for their continuing assistance, co-operation, and support throughout the year in the conduct of the Commission's extensive operations.

The Annual Report of the Commission would not be complete without grateful acknowledgment of the contribution the staff has made during the past year through its loyalty, efficiency, and technical skill in making the period under review one of successful accomplishment.

Respectfully submitted,

JAMES S. DUNCAN,  
*Chairman.*



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FIFTY-FIRST ANNUAL REPORT  
OF  
**The Hydro-Electric Power Commission  
of Ontario**

---

FOREWORD

THE Hydro-Electric Power Commission of Ontario is a corporate entity, a self-sustaining public enterprise endowed with broad powers with respect to electricity supply throughout the Province of Ontario. Its authority is derived from an Act of the Provincial Legislature passed in 1906 to give effect to recommendations of earlier advisory commissions that the water powers of Ontario should be conserved and developed for the benefit of the people of the Province. It now operates under The Power Commission Act (7-Edward VII, c.19) passed in 1907 as an amplification of the Act of 1906 and subsequently modified from time to time (Revised Statutes of Ontario, 1950, c.281, as amended). In addition to administering the enterprise over which it has direct control, the Commission exercises certain regulatory functions with respect to the province-wide group of municipal electrical utilities which it serves.

The Commission may have from three to six members, all of whom are appointed by the Lieutenant-Governor in Council. One commissioner must, and a second commissioner may, be a member of the Executive Council of the Province of Ontario. In the conduct of the Commission's affairs, the commissioners are responsible for, and are the final authority in establishing policy.

### Systems and the Power Supply

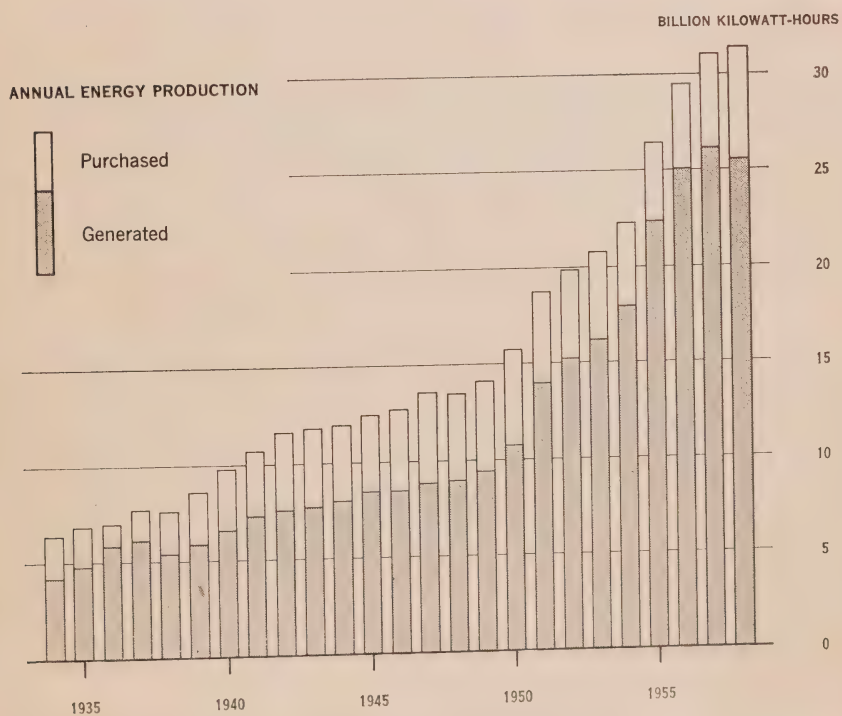
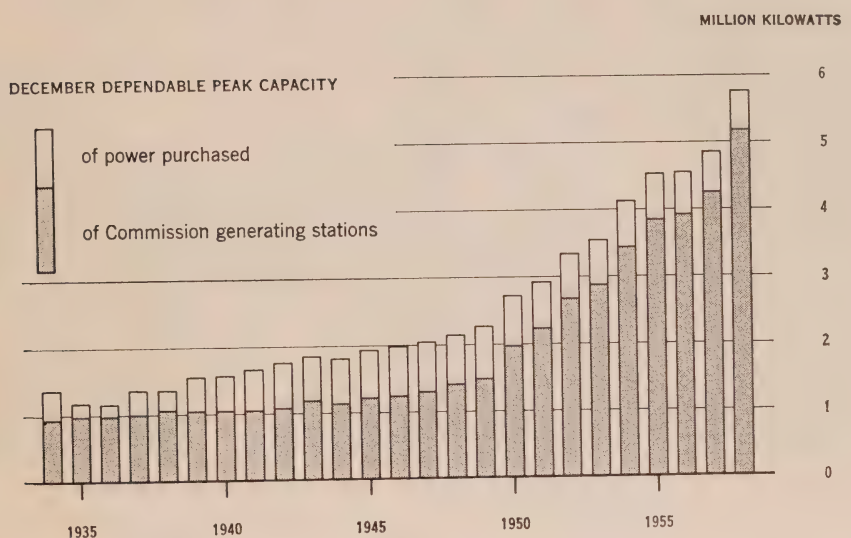
For the financial and administrative purposes of the Commission, the Province is divided into two parts. The roughly triangular part of the Province lying south of Lake Nipissing and the French and Mattawa Rivers is served by the Southern Ontario System. It is a fully integrated power system comprising the Niagara, Eastern Ontario, and Georgian Bay Divisions. The northern part of the Province is served by the Northern Ontario Properties, comprising the Northeastern and Northwestern Divisions. The Southern Ontario System is a co-operative system primarily serving a large group of municipalities receiving power at cost under contracts established according to the provisions of The Power Commission Act. The Northern Ontario Properties are not a co-operative system, but the power facilities of the Northwestern Division do serve a small group of municipalities at cost. Apart from the supply of power to these cost-contract customers the Northern Ontario Properties are held and operated in trust for the Province of Ontario. Each of the two northern divisions is an integrated power system, the Northeastern Division being also interconnected with the Southern Ontario System. For administrative purposes the whole area served by the Commission is subdivided into nine regions, seven in the south and two in the north, with regional offices located in nine major municipalities. At present the two northern regions coincide with the Northeastern and Northwestern Divisions.



OTTER RAPIDS — Here, where the turbulent waters of the Abitibi River are confined within a deep rocky channel, a new hydro-electric power station will be built by the Commission. Three generating units with a total dependable peak capacity of 131,000 kilowatts will be placed in service by 1962.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

TOTAL POWER RESOURCES AND ENERGY PRODUCTION







On September 5, 1958 formal ceremonies marked the official opening of the St. Lawrence Power Project. Before a backdrop symbolizing international amity and co-operation, Mr. J. S. Duncan, Chairman of the Commission, addresses the audience of 2,000 Canadian and United States visitors.

Power is delivered in bulk for resale either by the associated municipal electrical utilities, or by other interconnected systems including certain independent municipal distribution systems and other utilities operating within or beyond the Provincial boundaries. The associated municipal electrical utilities, administered by local commissions and functioning under the general supervision of The Hydro-Electric Power Commission of Ontario as provided for in The Power Commission Act and The Public Utilities Act, own and operate their own distribution systems to serve ultimate customers in most cities and towns, in many villages, and in certain township areas. The Commission also delivers bulk power to certain industrial customers who, though they may be located within areas served by the municipal utilities, frequently have power requirements of such magnitude, or create supply conditions so unusual, as to make service by the local utilities impracticable. In total, these two aspects of bulk delivery represent about 90 per cent of the Commission's energy sales. The remaining 10 per cent of the Commission's sales are made to ultimate customers either in rural areas served on behalf of the townships by the Commission's rural distribution facilities, or in a limited number of municipalities served by Commission-owned local distribution systems.

#### **Financial Features**

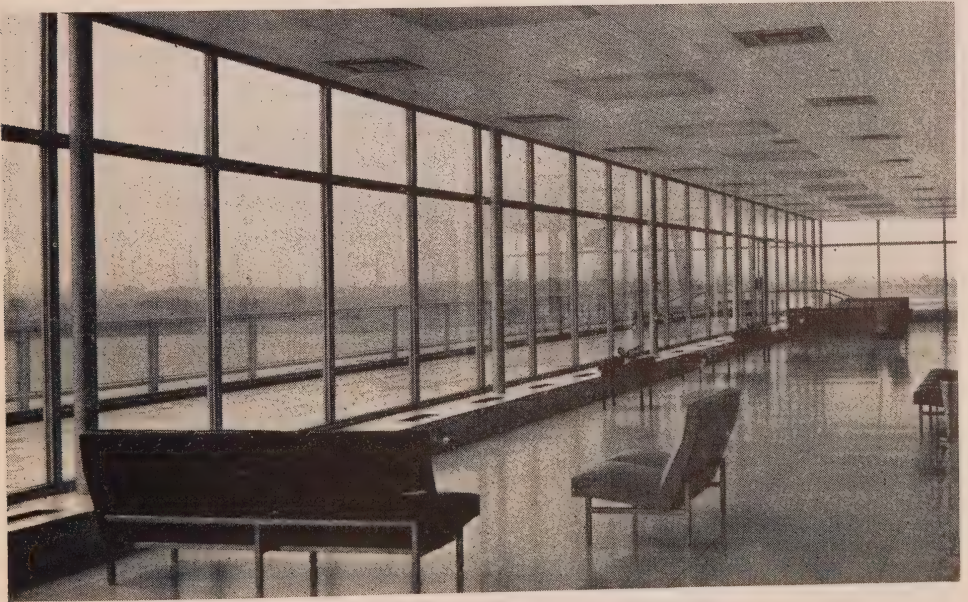
The basic principle governing financial operations of the undertaking and its associated municipal electrical utilities is that service is provided at cost. In the Commission's operations, cost of service includes payment for

power purchased, charges for operating and maintaining the power systems, and related fixed charges. The fixed charges represent interest on debt, reserve provisions for depreciation and for contingencies and rate stabilization, and the further provision of a sinking fund reserve for retiring the Commission's capital debt. The municipal utilities operating under cost contracts with the Commission are billed throughout the year at interim rates based on estimates of the cost of service. At the end of the year, when the actual cost of service is established, the necessary balancing (debit or credit) adjustments are made in their accounts. Retail rates for the municipal utilities are established at levels calculated to produce adequate revenue to meet cost. The Commission's retail rate structure for rural service other than industrial power service has been uniform throughout the Province since 1944.

The enterprise from its inception has been self-sustaining. The Province, however, guarantees the payment of principal and interest on all bonds issued by the Commission and held by the public. In addition, over a period of nearly forty years the Province has materially assisted the development of agriculture by contributing toward the capital cost of rural distribution facilities.

#### Annual Summary—1958

The increase in capacity of the Commission's generating stations during 1958 was the largest annual increase in the Commission's history. The total increase of 917,000 kilowatts was greater by 61 per cent than the previous maximum increase in 1954.



ST. LAWRENCE POWER PROJECT—From this side of the attractively furnished visitors' gallery the view to the left is down stream. The windows at the far end overlook the adjoining powerhouses extending towards Barnhart Island.



## Statistical

	1948
Dependable peak capacity, December.....	thousand kw 2,166
Primary power requirements, December.....	thousand kw 2,439
Annual energy generated and purchased.....	million kwh 13,554
Primary.....	million kwh 13,106
Secondary.....	million kwh 448
Annual energy sold by the Commission.....	million kwh 12,127
Annual revenue of the Commission (net after refunds).....	million \$ 63*
Fixed assets at cost.....	million \$ 546*
Gross expenditure on fixed assets in year.....	million \$ 91*
Total assets, less accumulated depreciation.....	million \$ 584*
Long-term debt.....	million \$ 274*
Transmission line.....	circuit miles 11,058
Primary rural distribution line.....	circuit miles 27,321
Average number of employees in year.....	16,359
Number of associated municipal electrical utilities.....	308
Ultimate customers served by the Commission and municipal utilities.....	thousands 1,004

\* Financial figures for 1948 and 1949 relate to a twelve-month period ending October 31, and for 1950 to a 14-month

In 1958 the Commission completed its extensive program of redevelopment on the Niagara River. This program, begun in 1950, has resulted in the installation of an additional 1,370,000 kilowatts of generating capacity on the river during the past five years. The last two units were placed in service at the main powerhouse of Sir Adam Beck-Niagara Generating Station No. 2 and the associated pumping-generating station was completed with the placing in service of the last three units of the six-unit station. At the St. Lawrence Power Project work was largely concentrated at Robert H. Saunders-St. Lawrence Generating Station, which was initially placed in service in July. By the end of the year seven of the sixteen units planned for the station were in service. The remaining nine units will be placed in service during 1959. With the completion of this station the last major hydro-electric site in southern Ontario will have been developed and the Commission must turn increasingly to sources other than hydraulic to meet growing demands for power.

During 1958 the dependable peak capacity of the Commission's resources in the Northwestern Division was augmented by 163,100 kilowatts when the three-unit stations at Whitedog Falls on the Winnipeg River and at Caribou Falls on the English River were placed in service and single units were added at each of Cameron Falls and Alexander Generating Stations on the Nipigon River and at Manitou Falls Generating Station on the English River. Work continued throughout the year at Silver Falls Generating Station on the Kaministiquia River. Work at Thunder Bay Generating Station, the new thermal-electric development at Fort William, progressed satisfactorily on a schedule that will bring the station into service in late 1961. In the Northeastern Division construction work was begun at two additional

## Summary 1948-1958

1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
2,282	2,730	2,942	3,353	3,565	4,135	4,530	4,552	4,844	5,761
2,490	2,799	3,109	3,278	3,488	3,702	4,229	4,514	4,784	5,139
14,173	15,880	18,811	19,974	20,912	22,386	26,555	29,523	31,101	31,450
13,664	15,287	17,544	18,774	19,951	20,788	23,258	25,537	27,405	28,382
509	593	1,267	1,200	961	1,598	3,297	3,986	3,696	3,068
12,623	14,074	16,632	17,728	18,587	19,928	23,909	26,828	28,318	28,633
69*	99*	102	112	136	143	162	183	197	198
693*	861*	1,020	1,177	1,355	1,469	1,573	1,733	1,931	2,108
150*	171*	165	163	184	133	115	173	209	191
768*	934*	1,099	1,266	1,491	1,653	1,788	2,011	2,255	2,423
417*	571*	690	862	1,040	1,162	1,209	1,392	1,573	1,691
11,778	13,637	14,280	14,813	15,251	15,785	16,115	16,489	16,717	17,499
32,059	34,793	38,198	40,277	41,589	42,540	43,851	44,492	45,375	46,438
21,055	21,187	21,174	19,570	19,242	18,750	17,278	18,075	19,597	17,701
315	321	324	327	332	338	343	350	351	354
1,078	1,187	1,249	1,316	1,390	1,467	1,540	1,612	1,674	1,757

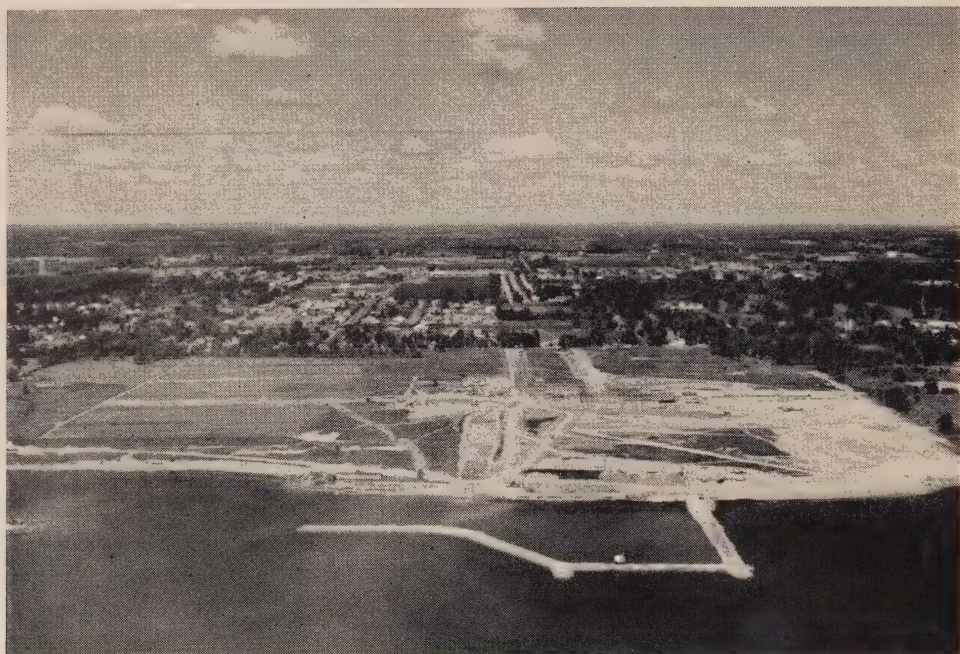
period ending December 31.

power developments, Otter Rapids on the Abitibi River and Red Rock Falls on the Mississagi River. Preparations were also made for the addition of a 60-cycle unit at Abitibi Canyon Generating Station on the Abitibi River early in 1959.

In the Southern Ontario System two large thermal-electric construction projects are at present being carried out by the Commission. They are the four-unit extension of Richard L. Hearn Generating Station in Toronto, and the Lakeview Generating Station just west of Metropolitan Toronto. The former, when complete in late 1960, will increase the capacity of Richard L. Hearn Generating Station by 800,000 kilowatts to 1,200,000 kilowatts. At Lakeview Generating Station the two units scheduled for installation in 1961 and 1962 will be rated at 300,000 kilowatts each, half as big again as the units in the extension at Richard L. Hearn Generating Station. When these units are in service at the end of 1962, the installed capacity of the Commission's conventional thermal-electric stations will be 2,164,000 kilowatts.

In the meantime the Commission is proceeding, in conjunction with Atomic Energy of Canada Limited, with plans for the development of Canada's first large-scale nuclear power station; since 1956 it has been engaged in the actual construction of a 20,000-kilowatt Nuclear Power Demonstration Plant as a joint undertaking with this Crown Corporation and Canadian General Electric Company Limited. Early in the year a Nuclear Power Plant Division of Atomic Energy of Canada Limited was established at the Commission's A. W. Manby Service Centre. It includes members of the staff of both the Corporation and the Commission engaged in furthering the work that will lead to the development of economic power from nuclear resources.





On the shore of Lake Ontario just west of Metropolitan Toronto, the site of Lakeview Generating Station is prepared for construction. Two turbo-generators, each with an installed capacity of 300,000 kilowatts, will be in service here by 1962.

In the northern areas of the Province, however, a number of promising hydraulic resources are still available, not all of them within economic transmission distance of concentrated loads at present transmission voltages. Accordingly the Commission has begun a test program of the feasibility of long-distance transmission at extra-high voltage, the results of which will have a significant bearing on the importance of these more remote resources. In total they may represent about a million kilowatts of potential capacity but many of them are located on streams of widely variable flow. It will, therefore, be necessary, even when these sites appear to be economically feasible for development, to provide a firm base for the capacity they offer by building additional thermal-electric stations. Hence the development of these hydraulic sites will be co-ordinated in the construction program with the building of thermal-electric resources as circumstances require.

The program of frequency standardization at 60 cycles in the Southern Ontario System is approaching completion. As an extension of the program in 1957, a number of customers in municipal and rural areas of the North-eastern Division were added, and their equipment was standardized in the period February-July 1958. During December the equipment of the millionth customer was changed over from 25- to 60-cycle frequency and the estimated 30,000 customers remaining on 25-cycle service in and around Toronto will have their equipment standardized before the end of July 1959. This is a full five years in advance of the date originally scheduled for the completion of the program.



## GUIDE TO REPORT

Details of the Commission's activities which have been briefly summarized in the foregoing paragraphs are given in the seven sections and four appendices of the Report which follow. Operations, finance, customer relations, and frequency standardization are the subjects of the first four sections and their related appendices. The narrative in Section I dealing with the production, purchase, and delivery of power is supplemented in the text by reports of weather conditions, maintenance, communications, and forestry, all of which are related to operations. Supplementary tables are in Appendix I. Section II includes the Commission's balance sheets, statements of financial operations, and tables showing the funded debt and advances from the Province of Ontario. Appendix II includes supporting schedules and accounts, in addition to the statements of reserves, sinking fund equity, and cost of power. In Section III consideration is given first to the wholesale operation of supplying power to municipal electrical utilities and to certain interconnected systems for resale, and second to service to certain industrial customers supplied directly by the Commission. The supply of power in wholesale quantities to the rural operating areas is then briefly discussed under the heading Rural Electrical Service. This commentary is immediately followed by a discussion of retail aspects of service to ultimate customers served by the Commission in these areas. Supplementary information on rural service is to be found in Appendix III. Another subsection of Section III, in the form of reports from the regions, deals with certain activities relative to service in municipal utilities. Many



On the north shore of the Mission River as it flows into Lake Superior at Fort William, ground is broken for the erection of the first major thermal-electric generating station in northern Ontario. At this station, to be known as Thunder Bay Generating Station, a single turbo-generator with an installed capacity of 100,000 kilowatts is scheduled for service in 1961.

of these activities have involved participation by, or the assistance of, members of the Commission's staff. Frequency standardization is the subject of Section IV, but the financial aspects of this project are included in Section II with the discussion of financial activities in general.

Engineering and construction activities are discussed in the two sections that follow. Section V deals with the planning and construction of facilities for the delivery of power. It includes descriptions of the more important construction projects and statistics relative to these and other facilities for the generation, transformation, and delivery of power. Section VI contains reports on the progress of some of the investigations being conducted by members of the Commission's Research Division.

Section VII deals with aspects of employee relations, training, and staff administration. Appendix IV lists Orders in Council and legislation pertaining to the Commission's affairs.

A large part of the Report is devoted to aspects of retail service to ultimate customers, especially that provided by the municipal electrical utilities. The commentary on these activities and the statistical tables applicable to them, formerly designated as Section VIII, are brought together in a supplement to the Report entitled *Municipal Electrical Service* beginning on page 195. The four statements that complete the municipal service supplement give: (1) Statement "A"—balance sheets, (2) Statement "B"—operating statements, (3) Statement "C"—rates, and (4) Statement "D"—other statistical information relating to the municipal systems. As the service rendered by the Commission-owned local systems is comparable to that provided by the municipal utilities, the local systems are included in the statistical summaries in the municipal supplement and are also listed in Statements "C" and "D".

## SECTION I

### OPERATION OF THE SYSTEMS

THE demands on the Commission for electric power in 1958 reflected the changes in business activity throughout the Province. During the first three-quarters of the year volume of output generally declined; however, a sharp upturn of industrial activity in the last quarter contributed to primary peak and energy demands which were the highest recorded by the Commission. Peak demands represented a growth in load of 7.4 per cent, a rate of growth somewhat steeper than the long-term rate over the past 36 years. Energy demands, showing a 3.6 per cent growth over 1957 demands, fell considerably short of the long-term rate.

The increase in power requirements was met by the placing in service of three new hydro-electric stations and the extension of four other stations. The Robert H. Saunders-St. Lawrence Generating Station was placed in service early in July and at the end of the year seven generating units were producing power. New three-unit generating stations at Whitedog Falls and Caribou Falls were placed in service during the year. At Sir Adam Beck-Niagara Generating Station No. 2 two additional units were placed in service at the main generating station and three at the pumping-generating station. Single-unit extensions were placed in service at Manitou Falls, Cameron Falls, and Alexander Generating Stations.

The total net output of all resources in 1958 was 31.5 billion kilowatt-hours, an increase of 1.1 per cent over 1957. Of this amount, 25.6 billion



## POWER SUPPLY STATISTICS—1958

(Italic type indicates per cent decrease)

		Southern Ontario System	Northern Ontario Properties		Total
			NORTH- EASTERN DIVISION	NORTH- WESTERN DIVISION	
Resources					
Dependable peak capacity	1958	4,930,400	300,400	530,300	5,761,100
--December (kilowatts)	1957	4,174,400	300,400	369,300	4,844,100
Per cent change		18.1	0	43.6	18.9
Requirements					
PRIMARY					
Peak—Annual maximum	1958	4,252,715	453,199	448,821	*5,139,004
(kilowatts)	1957	3,917,464	459,117	406,880	*4,783,461
Per cent change		8.6	1.3	10.3	7.4
Energy—Total annual	1958	22,633,438,156	3,034,644,968	2,713,801,843	28,381,884,967
(kilowatt-hours)	1957	22,076,428,819	2,791,545,958	2,536,961,644	27,404,936,421
Per cent change		2.5	8.7	7.0	3.6
Loads					
PRIMARY AND SECONDARY					
Peak—Annual maximum	1958	4,459,367	469,048	489,121	*5,417,536
(kilowatts)	1957	4,104,579	459,117	406,880	*4,970,576
Per cent change		8.6	2.2	20.2	9.0
Energy—Total annual	1958	25,486,481,756	3,133,555,628	2,830,342,462	31,450,379,846
(kilowatt-hours)	1957	25,716,135,919	2,819,625,136	2,564,995,704	31,100,756,759
Per cent change		0.9	11.1	10.3	1.1
PRIMARY ONLY					
Energy—Total annual	1958	22,633,438,156	3,034,644,968	2,713,801,843	28,381,884,967
(kilowatt-hours)	1957	22,076,428,819	2,791,545,958	2,536,961,644	27,404,936,421
Per cent change		2.5	8.7	7.0	3.6

\*These annual maxima are the arithmetic sums of the three non-coincident system peaks in December. In the two northern divisions the annual maximum does not necessarily occur in December.

kilowatt-hours were produced by 65 hydro-electric and 4 thermal-electric generating stations operated by the Commission; the balance was purchased. Primary energy produced for use in Ontario amounted to 28 billion kilowatt-hours, about 3.6 per cent more than in 1957.

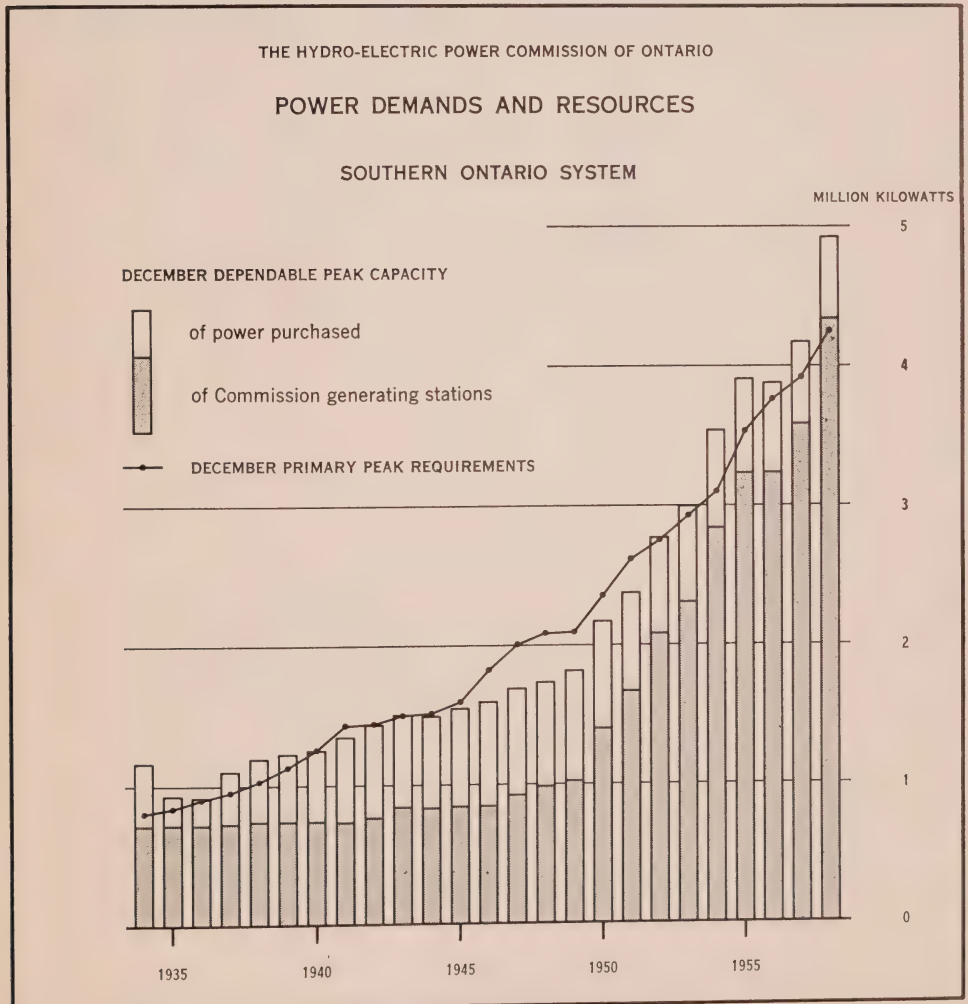
**Stream-Flow and Storage Conditions**

Water conditions generally in Ontario were less favourable during the greater part of 1958 than during the previous year. In the southern areas of the Province the spring freshet, which did not begin until late

April, was of short duration. As a result lake-levels in the southern watersheds remained below normal until autumn. Similar conditions prevailed in northeastern areas until heavy rains in late August and September restored water storages to their normal levels. In the northwest section of the Province stream-flows on the English and Albany River watersheds did not improve until after mid-year, too late to enable the water held in storage to reach normal levels in 1958. Water conditions elsewhere in the area, however, were satisfactory throughout the year.

### SOUTHERN ONTARIO SYSTEM

Although new resources were available at Sir Adam Beck-Niagara Generating Station No. 2 and also at Robert H. Saunders-St. Lawrence Generating Station, hydro-electric output in the Southern Ontario System was slightly less than in 1957, largely as the result of unfavourable water

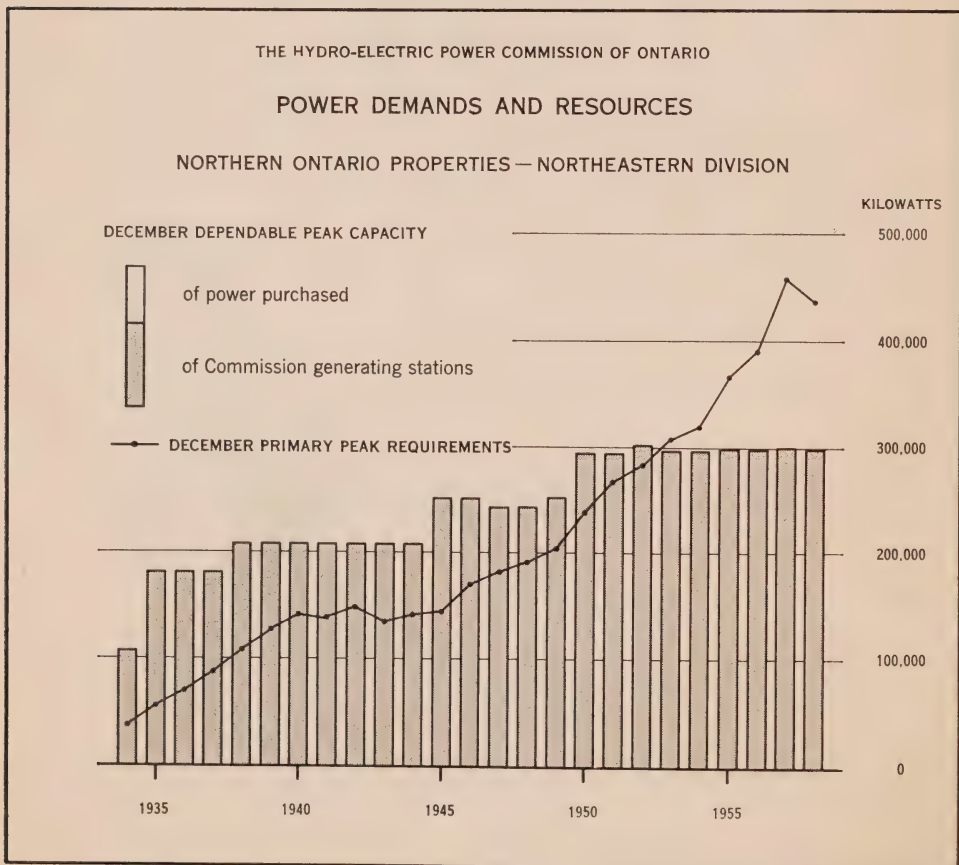


conditions. The summary statistical table on page 114 indicates a decrease of 4.2 per cent in the energy output of generating stations, which was offset by purchases from other suppliers. The purchase of relatively inexpensive hydro-electric energy permitted a substantial reduction in the more costly output of thermal-electric generating stations. Late in the year parallel operation was successfully established between the Southern Ontario System and the Power Authority of the State of New York, and operation in parallel has since become the normal practice. Parallel operation with Quebec Hydro is expected to become normal procedure in the early future.

The primary peak in the system occurred on December 16 and amounted to 4,252,715 kilowatts, 8.6 per cent greater than the primary peak demand of last year.

### NORTHERN ONTARIO PROPERTIES

The output of hydro-electric resources in the Northeastern Division was only slightly greater in 1958 than in 1957 and in order to meet increased energy demands, the interconnection with the Southern Ontario System was



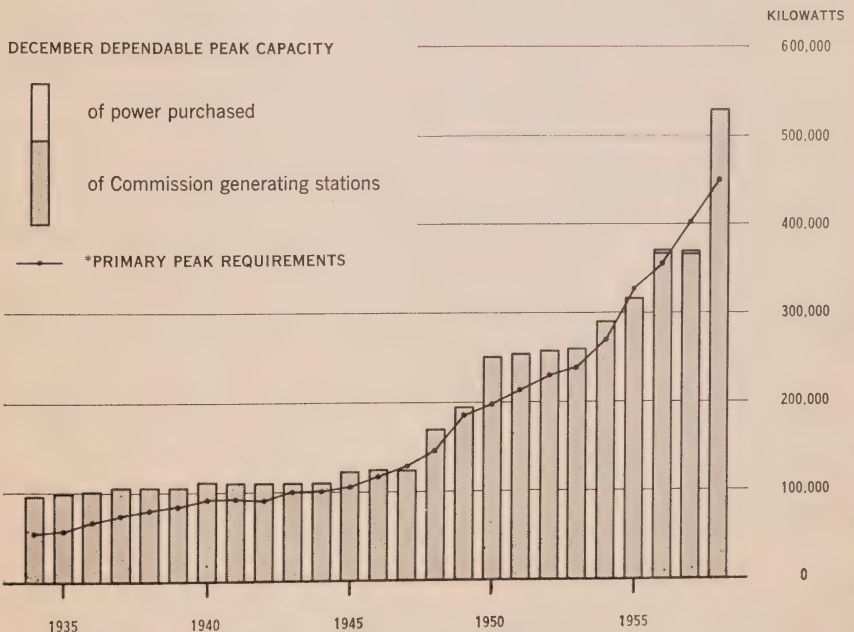
used exclusively for the purpose of transferring power to the Northeastern Division. The primary peak demand for the year, which normally occurs in the fall, occurred in February and amounted to 453,199 kilowatts, 1.3 per cent below the primary peak demand in 1957; the primary peak demand in December 1958 was 437,468 kilowatts. Primary energy requirements were 8.7 per cent greater than those in 1957.

Output in the Northwestern Division was increased substantially with the placing in service of Whitedog Falls Generating Station and Caribou Falls Generating Station and the addition of single units at each of Manitou Falls, Cameron Falls, and Alexander Generating Stations. Primary peak demands, which reached 448,821 kilowatts in December, showed a growth of 10.3 per cent during the year. Primary energy requirements, up 7.0 per cent over 1957, increased at a rate substantially lower than the 12.0 per cent recorded in the previous year, reflecting the slackening in the pace of industrial growth in the Division.

## THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

## POWER DEMANDS AND RESOURCES

## NORTHERN ONTARIO PROPERTIES — NORTHWESTERN DIVISION

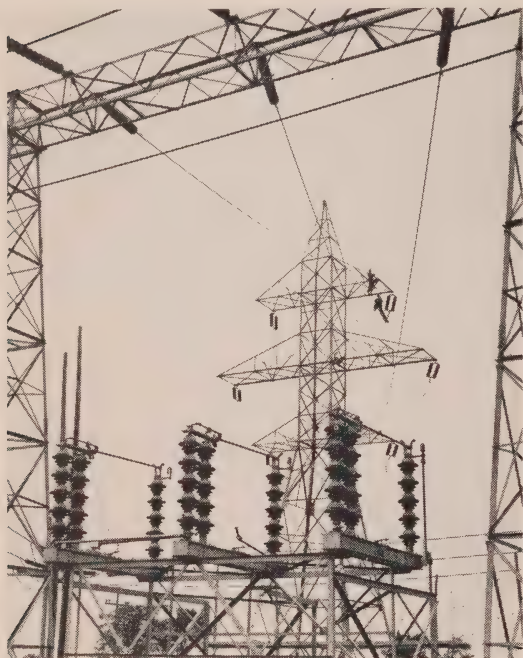




## MAINTENANCE OF THE SYSTEMS

### Mechanical and Electrical Maintenance

There was a notable decrease in the extent of major overhauls during 1958, attributable in part to the effectiveness of routine maintenance and the present standard practice of doing repair welding on turbine runners in place. Another contributing factor was that most of the older units had been recently overhauled and a great many new units had not yet reached the stage where dismantling was required.



High above the ground, line-construction crews install insulators on the 230-kv double-circuit, steel-tower line between St. Lawrence Transformer Station and Hinchinbrooke Switching Station 102 miles to the west. Construction of this line was part of the program of work under way in 1958 to incorporate the output of the Robert H. Saunders-St. Lawrence Generating Station into the system.

The runner blade edges of two turbines at Chats Falls Generating Station were modified to increase their resistance to cavitation and cracking. Three water-lubricated lignum-vitae turbine bearings, two at Sir Adam Beck-Niagara Generating Station No. 1 and one at DeCew Falls Generating Station No. 2, were replaced by oil-lubricated babbit bearings.

Among the more significant outages of rotating equipment during the year were three large units showing failure of field connections or field insulation and four units with stator winding failure. Epoxy resin was applied to replace abraded insulation to the end coils of the stator windings on eight large units. This relatively simple operation effected repairs at a small fraction of the normal cost of taping and varnishing.

Twenty-four power transformers were given complete overhaul, six of them after failure in service. One oil-type and two air-blast, 230-kv circuit-breakers required extensive repairs after operating failure.

### Lines and Communications

Maintenance was carried out on a number of 230-kv lines without removing them from service. Specially designed live-line tools are being used for the replacement of cable-type vibration dampers by torsional dampers of more modern design on the original 230-kv lines from Chats

Falls Generating Station. Maintenance of air-break switches is also being carried out without service interruption by the use of recently developed tools.



Wearing heavy rubber and leather gloves this lineman can handle in perfect safety live power lines transmitting up to 5,000 volts.

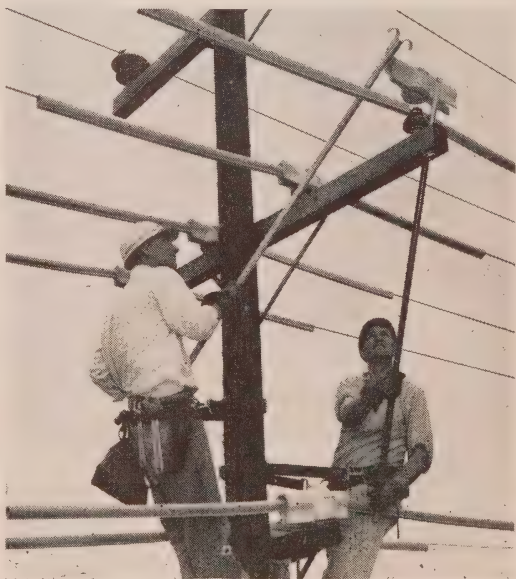
installed to prevent corrosion. On other underground installations two new types of corrosion-protective coating were introduced—polyethylene coating and self-vulcanized rubber coating.

Over 17,000 transmission, distribution, and communication poles were replaced by maintenance crews during the year. Just over 400 steel towers were cleaned and repainted as part of the regular program, many of them without interruption to service.

Fifty-five mobile frequency-modulation radio installations were completed, bringing the total now in use in the mobile radio system to 569. In the

Rehabilitation was carried out on about 40 miles of 44-kv line in the East Central Region. A section of 115-kv cable between Toronto-Leaside and Toronto-Glengrove Transformer Stations was relocated to accommodate roadway alterations.

Following discovery that the lead sheath on the 115-kv cable between Hamilton-Kenilworth and Hamilton Beach Transformer Stations was subject to dangerously high direct-current potentials, cathodic protection was



A new technique is used to place protective rubber hose and hoods on 8,000-volt transmission lines. The rubber provides a safety shield through which maintenance and repairs can be carried out.



extension of voice communication to meet expanding operation requirements, the Commission's facilities were further integrated with those of The Bell Telephone Company. Major installations were made by the Company at new generating stations and other Commission properties.

The Commission has seven helicopters engaged in line patrol and operations for the control of brush on transmission line rights of way.



One of the Commission's helicopters sprays herbicide to control the growth of vegetation along transmission-line routes. In northern Ontario approximately 6,400 acres were sprayed in this way in 1958.

They were in flight for a total of 3,700 hours during the year, patrolling 163,000 circuit miles of high-voltage line and spraying herbicide on isolated rights of way to the extent of 6,400 acres in the two northern regions. Including the area sprayed from the air, the use of chemicals generally for control of brush growth was extended to well over 40,000 acres during 1958.

#### **Forestry**

In an effort to curb the rapidly growing incidence of Dutch elm disease, elm trees on Commission properties were treated with insecticide during the year. The disease, spreading gradually into Ontario from the

United States, has now reached disturbing proportions. Other forestry work involved tree pruning and tree removal on more than 10,900 miles of the Commission's transmission and distribution line in operation, and nearly 1,500 miles of newly constructed or municipally owned line. As part of the conservation program, 66,500 seedling trees were planted on Commission properties in the Eastern and Northeastern Regions.

## SECTION II

### FINANCE

THIS section of the Report, together with Appendix II, deals with the financial operations of the Commission as they relate to the Southern Ontario System and the Northern Ontario Properties. The financial operating results for the municipal electrical utilities are reported in a municipal service supplement at the end of the Report.

The Commission's revenue comes from three principal sources—municipal utilities and interconnected systems purchasing power for resale, industrial customers served directly by the Commission, and other customers served by Commission-owned retail distribution facilities. Gross revenues in 1958 amounted to \$201,259,225, and the total cost of providing service established at the year end was \$197,690,110. The difference of \$3,569,115 was credited, \$2,828,164 to cost-contract municipalities in the Southern Ontario System, \$38,868 to cost-contract municipalities in the Northwestern Division of Northern Ontario Properties, and the remainder to the Rural Power District stabilization of rates reserve for the Southern Ontario System and to the surplus account arising from supply of power to customers served for the account of the Province of Ontario.

The balance sheets and operating statements for the Southern Ontario System and the Northern Ontario Properties are included in this section of the Report together with a statement of funded debt and a schedule of Provincial advances outstanding. Supporting schedules for these basic



statements are to be found in Appendix II beginning, for the Southern Ontario System, on page 128, and for the Northern Ontario Properties, on page 162. The two statements of the cost of power in Appendix II itemize for each cost-contract municipality its share of the total costs incurred and its contribution under interim rates to the Commission's revenue.

### Data Processing

An event of importance during the year was the installation and initial operation of Univac II, which is the central electronic feature of what will be a province-wide integrated data processing system to handle customer, personnel, and materials information, and a wide variety of analyses and reports for management control.

The main electronic components were delivered in May and, after a period of testing, were ready for service in August. By the end of the year a system for handling customer information from the regions had been developed. Final testing procedures indicated that, with respect to rural operations, all reports, customers' bills, and control information will be processed through the system early in 1959. The communications network was completed to link area offices to their respective regional offices in the Toronto and West Central Regions, and these regional offices in turn to Head Office. The network will be extended to the other seven regions in 1959.



**DATA-PROCESSING EQUIPMENT**—In 1958 the Commission accepted delivery of the main components of an electronic data-processing system. Here an operator sits at the controls of the central computer, which is the focal part of the system.

The analysis of the system for handling personnel data was completed and the system will be introduced in 1959. It will include payroll, labour

statistics, and other information relative to Commission employees. The centralization of inventory records has been completed as the first stage in the development of the materials system.

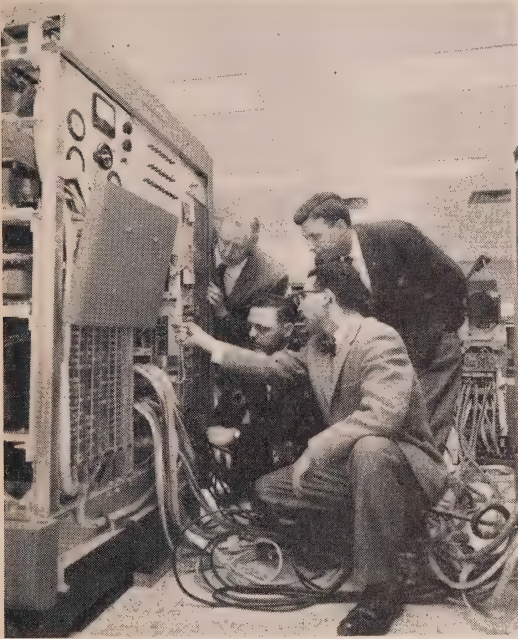
The electronic computer has also been used for several complex scientific and engineering computations.

### OPERATING RESULTS—1957

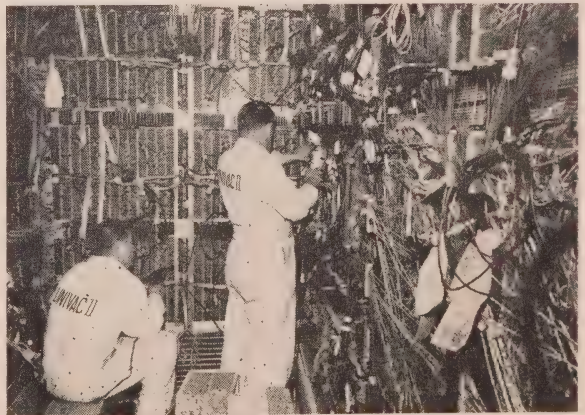
In both operating statements, proceeds from the sale of certain secondary energy, for the most part 25-cycle, are shown as an offset against cost rather than as revenue as in former years. The total amount representing these sales was \$5,560,369 of which \$5,096,253 apply to the Southern Ontario System and \$464,116 to the Northern

Ontario Properties. In the comparison of 1958 results with those of 1957, allowance has been made for this change in presentation, and year to year changes are calculated on the 1957 basis. In effect, gross revenues of the Commission rose by \$6,023,123 or 3.0 per cent and the cost of providing service by \$6,321,797 or 3.2 per cent. These changes are analysed in some detail for the Southern Ontario System and for the Northern Ontario Properties in turn.

A substantial reduction in fuel and other operating costs at thermal-electric stations as compared with those in 1957 was sufficient to offset in large part the increases in all other aspects of



**DATA-PROCESSING EQUIPMENT**—The power-supply unit of the high-speed printer is examined by members of the Data Processing Division during installation.



**INSTALLATION OF UNIVAC II**—To the uninitiated the interior of the central computer is a maze of wires. The specialist is prepared to deal with 200 miles of wiring, 5,600 tubes and 18,000 crystal diodes in the assembly of this unit.



operating costs during 1958 with the result that these costs in total were up only 2.5 per cent from those in 1957. Interest and fixed charges increased by slightly more than 3.7 per cent, a normal reflection of the expansion in fixed assets. These increases were in large part counterbalanced by reductions in the amounts set aside for stabilization of rates and contingencies, for nuclear power development, and for amortization of the costs of frequency standardization. (See notes to the Cost of Power Statements on pages 152-153 and 168-169.)

## SOUTHERN ONTARIO SYSTEM

Gross revenues at \$166,005,358 exceeded comparable revenues in 1957 by 1.3 per cent, while costs at \$162,909,905 increased by 1.6 per cent. In these comparisons allowance is made for the \$5,096,253 from the sale of secondary energy, chiefly 25-cycle. These revenues and costs apply to the sale of 23,285,785,750 kilowatt-hours, the Southern Ontario System share of total sales as shown in the table on pages 116 and 117.

Operating costs, including the cost of purchased power, were up from those of 1957 by less than 1 per cent. The remainder of the rise in cost of providing services includes increases of 11.7 per cent in interest, 12.6 per cent in depreciation provisions, and 8.8 per cent in funds set aside for the retirement of capital debt. The 12.6 per cent increase in depreciation provision reflects a change in the rural asset life table adopted as of January 1, 1958 and includes \$2,100,000 appropriated to make up the accumulated deficiency in the reserve on the new basis at that date. Total costs were not substantially greater than those in 1957 because the foregoing increases were offset to a large extent by lower special provisions for stabilization of rates and contingencies, and by a considerable reduction in the amount set aside to amortize the cost of frequency standardization. This last item of cost is dealt with in detail in the notes to the Cost of Power Statement on page 153.

The deduction from cost of \$398,686 for matured sinking fund is the sum of the amounts credited to the accounts of 135 municipal utilities, and representing their matured portion of sinking fund allocations for the retirement of the Commission's capital debt. For 18 municipal utilities the cost of power was reduced to \$46.26 per kilowatt per annum by the application of the annual interest on a fund set aside in previous years for this purpose. The corresponding cost ceiling in 1957 was \$46.23. The average cost per kilowatt to utilities in the Southern Ontario System for 1958 was \$37.20 as compared with \$36.86 in 1957.

The cost of frequency standardization work done during the year was \$19,080,041, including the \$6,291,994 of equipment and supplies by which the inventory was reduced in 1958. An amount of \$7,220,345 plus interest of \$7,545,750 was charged to the cost of power, and \$96,106 spent on standardization of rural facilities was recovered from rural revenues. The amount to be written off in future years was increased by \$11,763,590 to a total of \$191,961,575 at the end of 1958.

**Table of Expenditures by The Hydro-Electric Power Commission of Ontario  
on Frequency Standardization**

	Prior to 1958	During 1958	Total at Dec. 31, 1958	Amounts amortized or to be amortized
<b>Southern Ontario System</b>	\$	\$	\$	\$
Standardization of customers' equipment and system facilities (charged to frequency standardization account) . . . . .	312,597,705	18,983,935	331,581,640	139,620,065
Standardization of rural and local distribution facilities (charged to rural and local operations, maintenance, and administrative expense)	1,609,492	96,106	1,705,598	1,705,598
	314,207,197	19,080,041	333,287,238	141,325,663
Expenditures on inventory of equipment, supplies and other assets . . .	8,181,473	6,291,994	1,889,479	..
Amount to be written off in future years . . . . .	..	..	..	191,961,575
Value of equipment, supplies and other assets for future standardization work . . . . .	..	..	..	1,889,479
Total expenditures . . . . .	322,388,670	12,788,047	335,176,717	335,176,717
<b>Northern Ontario Properties</b>				
Standardization of customers' equipment . . . . .	355,055	4,306,922	4,661,977	..
Amortized to December 31, 1958 . . .	..	..	..	922,337
Amount to be written off in future years . . . . .	..	..	..	3,739,640
	355,055	4,306,922	4,661,977	4,661,977

## NORTHERN ONTARIO PROPERTIES

During 1958 the Commission's sales amounted to 5,347,533,809 kilowatt-hours, the Northern Ontario Properties share of total sales as shown in the table on pages 116 and 117. Gross revenues at \$35,253,867 exceeded by 11.9 per cent comparable revenues in 1957. Cost-contract utilities in the Northwestern Division provided an increase of slightly more than 5 per cent in revenue, rural customers a substantial 23.9 per cent and other customers served for the account of the Province an increase of nearly 10.4 per cent. The cost of providing service to all customers, at \$34,780,205 rose also by 11.9 per cent and the cost of service to rural customers by 12.0 per cent. The 23.9 per cent growth in rural revenues is therefore reflected in considerably improved results for rural operations, the deficiency of revenue, at \$226,320, being lower than for any other year in the past ten years.

Operating costs of \$16,859,956 were 9.1 per cent greater than in 1957. This increase reflects the substantially greater energy loads experienced in 1958, which in turn required the transfer of more kilowatt-hours from the Southern Ontario System, and a 31.4 per cent increase in total cost of energy so transferred. There were increases of 28.0 per cent in interest charges, 14.3 per cent in depreciation provisions and 26.7 per cent in funds set aside for the retirement of capital debt. These increases in operating costs were offset to a considerable extent by reducing the allocation to

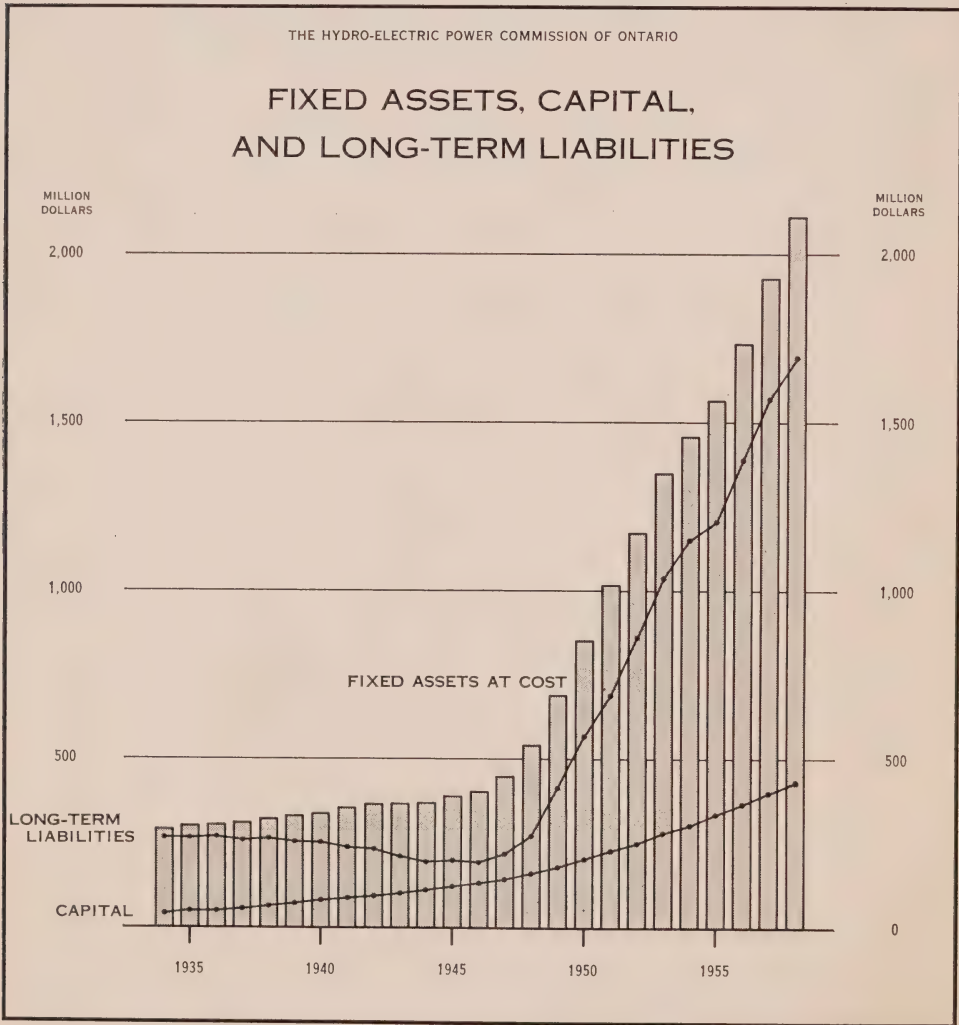


reserves for stabilization of rates and contingencies below last year's allocation by \$921,098.

The cost of frequency standardization in the Northeastern Division of the Northern Ontario Properties was \$4,306,922 in 1958. An amount of \$283,572 plus \$92,463 in interest on the outstanding balance was charged in the current year's operations, and after allowance for a credit of \$283,710 in the frequency standardization account at the end of 1957 there remained a balance of \$3,739,640 to be written off in future years.

SUMMARY OF FINANCIAL POSITION

The gross expenditure on fixed assets during the year amounted to \$190,656,003 of which 66 per cent was spent on generating facilities. The



Robert H. Saunders-St. Lawrence and Richard L. Hearn Generating Stations account for well over half the total spent on generating facilities. Additional or improved rural facilities represent \$19,555,659 or slightly over 10 per cent of the total gross expenditure. After allowing for sales and retirements amounting to \$13,287,083 there was a net increase of \$177,368,920 in the investment in fixed assets bringing the total to \$2,107,975,634. This total includes \$238,908,547 in rural fixed assets. Accumulated depreciation had been provided on total fixed assets to the extent of \$229,465,177.

The funds required by the Commission for capital investment and other purposes in 1958 were obtained from sources as shown in the table below. All figures are net changes in the balance sheet items, 1958 as compared with 1957.

These funds were required for:

Additions to fixed assets . . . . .	\$ 177,369,000
Frequency standardization to be written off in future years . . . . .	15,787,000
Additions to reserve fund investments . . . . .	8,197,000
Addition to deferred expenses . . . . .	504,000
Repayment of debenture debt and Provincial advances . . . . .	31,122,000
Total required . . . . .	\$ 232,979,000

These funds were obtained from:

Increase in debenture debt . . . . .	\$ 150,000,000
Operating charges not requiring a cash outlay	
Depreciation allowance . . . . .	21,516,000
Reserves . . . . .	23,737,000
Sinking fund . . . . .	27,434,000
Provincial assistance for rural construction, and Surplus (NOP) . . . . .	1,127,000
Reduction in inventories . . . . .	8,594,000
Reduction in working funds . . . . .	571,000
Total obtained . . . . .	\$ 232,979,000

The total assets of the Commission at December 31, 1958 after deducting accumulated depreciation and the inter-system account were \$2,421,226,156 as compared with \$2,254,503,479 at December 31, 1957. The long-term debt at December 31, 1958 was \$1,691,478,426 as compared with \$1,572,600,993 at the end of 1957. Net capital of \$429,654,307 at December 31, 1958 included \$300,371,932 used for the retirement of long-term debt, \$15,344,991 for sinking fund investment, \$113,538,494 in Provincial contributions for rural assistance, and \$398,890 of surplus arising from service to customers in Northern Ontario Properties supplied for the account of the Province.

THE HYDRO-ELECTRIC POWER  
SOUTHERN  
BALANCE SHEET

## ASSETS

## FIXED ASSETS AT COST:

Power System.....	\$ 1,503,496,801	
Administrative and service buildings and equipment.....	28,974,496	
Rural Power District.....	202,672,592	
	<u>\$ 1,735,143,889</u>	
Less accumulated depreciation.....	188,197,391	
		<u>\$ 1,546,946,498</u>

## FREQUENCY STANDARDIZATION:

Equipment, supplies, and other assets for future standardization work.....	\$ 1,889,479	
Cost of completed standardization after charging \$139,620,065 to reserves and cost of power—balance to be written off in future years.....	191,961,575	
		<u>193,851,054</u>

## CURRENT ASSETS:

Cash in banks.....	\$ 766,596	
Cash on deposit with trust companies.....	6,000,000	
Temporary investments in government securities at market value.....	4,500,000	
Working funds.....	211,845	
Power accounts receivable.....	20,803,080	
Other accounts receivable.....	4,246,793	
Interest accrued on investments held for general reserves...	983,397	
Customers' securities on deposit.....	288,550	
Prepayments and sundry deposits.....	184,682	
		<u>37,984,943</u>

## INVENTORIES HELD FOR OPERATION, MAINTENANCE, AND CONSTRUCTION:

Coal at cost.....	\$ 14,312,926	
Other materials and supplies at cost.....	16,217,297	
Tools and equipment at cost less depreciation.....	13,662,754	
		<u>44,192,977</u>

## DEFERRED CHARGES AND OTHER ASSETS:

Debenture discount and expense less amounts written off...	\$ 17,933,274	
Agreements, mortgages, and sundry investments.....	348,170	
Exchange discount on funded debt.....	3,859,876	
Accounts receivable in annual instalments.....	587,253	
Deferred work orders and other assets.....	4,175,917	
		<u>26,904,490</u>

## RESERVE FUND INVESTMENTS:

Government and government-guaranteed bonds		
Investments held for special reserves at amortized cost plus accrued interest (approximate market value \$88,683,000)		
Pension fund.....	\$ 94,403,356	
Employer's liability insurance fund.....	3,240,378	
Employees' savings and insurance fund.....	792,823	
Investments held for other reserves at amortized cost (approximate market value \$95,565,000)		
Stabilization of rates and contingencies.....	91,091,882	
Sinking fund.....	9,584,381	
		<u>199,112,820</u>
		<u>\$ 2,048,992,782</u>

## Auditors' Report

We have examined the balance sheet of the Southern Ontario System of The Hydro-Electric Power Commission of Ontario as at December 31, 1958, and the statement of operations for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the accompanying balance sheet and statement of operations present fairly the financial position of the Southern Ontario System of the Commission as at December 31, 1958 (subject to the trusts which prevail in respect thereto) and the results of the operations for the year ended on that date.

CLARKSON, GORDON & CO.  
Chartered Accountants.

COMMISSION OF ONTARIO  
**ONTARIO SYSTEM**  
 AS AT DECEMBER 31, 1958

LIABILITIES, RESERVES, AND CAPITAL

LONG-TERM LIABILITIES (at par of exchange)  
 including \$12,208,706 maturing in 1959:

Funded debt.....	\$ 1,646,236,000	
Less—issued to finance Northern Ontario Properties, a separate trust operated by the Commission.....	258,227,045	
	<u>\$ 1,388,008,955</u>	
Advances from the Province of Ontario.....	\$45,242,426	
Less advances for Northern Ontario Properties.....	7,993,994	
	<u>37,248,432</u>	
		<u>\$ 1,425,257,387</u>

CURRENT LIABILITIES:

Accounts and payrolls payable and accrued charges.....	\$ 30,837,366	
Customers' deposits.....	828,548	
Interest accrued on long-term liabilities.....	14,499,768	
Northern Ontario Properties—current account.....	1,413,197	
	<u></u>	47,578,879

SPECIAL RESERVES:

Pension fund.....	\$ 94,388,176	
Employer's liability insurance fund.....	3,059,690	
Employees' savings and insurance fund.....	823,275	
Exchange premium received on funded debt.....	4,746,301	
	<u></u>	103,017,442

GENERAL RESERVE:

Stabilization of rates and contingencies.....		120,123,458
---	--	-------------

CAPITAL:

Sinking fund reserve:

Represented by—

Funded debt and Provincial advances

retired through sinking funds.....\$247,861,538

Sinking fund investments and cash.....9,632,989

\$ 257,494,527

Contributed capital:

Province of Ontario, assistance for rural construction .. 95,521,089

353,015,616

\$ 2,048,992,782

NOTE: Commitments under uncompleted contracts for the construction of fixed assets, approximately \$105,000,000.



## NORTHERN ONTARIO

Held and Operated by The Hydro-Electric Power Commission of Ontario in  
BALANCE SHEET

## ASSETS

## FIXED ASSETS AT COST:

Power System.....	\$ 333,739,246
Administrative and service buildings and equipment.....	2,856,544
Rural Power District.....	36,235,955
	<hr/>
	\$ 372,831,745
Less accumulated depreciation.....	41,267,786
	<hr/>
	\$ 331,563,959

## FREQUENCY STANDARDIZATION:

Cost of completed standardization after charging \$922,336 to cost of power—balance to be written off in future years.....	3,739,640
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## CURRENT ASSETS:

The Hydro-Electric Power Commission of Ontario—current account.....	\$ 1,413,197
Cash in banks.....	414,064
Working funds.....	46,855
Power accounts receivable.....	4,121,055
Other accounts receivable.....	523,709
Rural Power District grants receivable.....	696,531
Interest accrued on reserve fund investments.....	161,046
Customers' securities on deposit.....	1,105,482
Prepayments.....	457
	<hr/>
	8,482,396

## INVENTORIES HELD FOR OPERATION, MAINTENANCE, AND CONSTRUCTION:

Materials and supplies at cost.....	\$ 1,558,501
Tools and equipment at cost less depreciation.....	529,684
	<hr/>
	2,088,185

## DEFERRED CHARGES AND OTHER ASSETS:

Debenture discount and expense less amounts written off.....	\$ 3,253,880
Exchange discount on funded debt.....	164,093
Account receivable in annual instalments 1959-1989.....	1,835,599
Deferred work orders and other assets.....	1,303,570
	<hr/>
	6,557,142

## RESERVE FUND INVESTMENTS:

Government and government-guaranteed bonds at amortized cost (approximate market value \$18,574,000)	
Held for—Stabilization of rates and contingencies reserve.....	\$ 15,495,805
Sinking fund reserve.....	5,719,444
	<hr/>
	21,215,249
	<hr/>
	\$ 373,646,571

## Auditors' Report

We have examined the balance sheet of the Northern Ontario Properties, held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario and municipalities supplied with power at cost, as at December 31, 1958, and the statements of operations and surplus for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the accompanying balance sheet and statements of operations and surplus present fairly the financial position of the Northern Ontario Properties as at December 31, 1958 (subject to the trusts which prevail in respect thereto) and the results of the operations for the year ended on that date.

CLARKSON, GORDON & CO.  
Chartered Accountants.

## PROPERTIES

Trust for the Province of Ontario and Municipalities Supplied with Power at Cost  
AS AT DECEMBER 31, 1958

## LIABILITIES, RESERVES, AND CAPITAL

LONG-TERM LIABILITIES (at par of exchange)  
including \$2,536,980 maturing in 1959:

Funded debt.....	\$ 258,227,045	
Advances from the Province of Ontario.....	7,993,994	
		\$ 266,221,039
Representing the portion of the funded debt and advances from the Province of Ontario owing by The Hydro-Electric Power Commission of Ontario, issued to finance Northern Ontario Properties.		

## CURRENT LIABILITIES:

Accounts and payrolls payable and accrued charges.....	\$ 2,100,092	
Customers' deposits.....	5,444,698	
Interest accrued on long-term liabilities.....	2,629,641	
		10,174,431

## SPECIAL RESERVE:

Exchange premium received on funded debt.....	176,489
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## GENERAL RESERVE:

Stabilization of rates and contingencies.....	20,435,921
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## CAPITAL:

Sinking fund reserve:		
Province of Ontario.....	\$ 45,846,906	
Municipalities supplied with power at cost....	12,375,490	
		\$ 58,222,396

## Represented by—

Funded debt and Provincial advances retired through sinking funds.....	\$ 52,510,394	
Sinking fund investments.....	5,712,002	
		\$ 58,222,396

## Contributed capital:

Province of Ontario, assistance for rural construction.....	18,017,405	
Surplus arising from supply of power to customers served for the account of the Province of Ontario.....	398,890	
		76,638,691
		<u>\$ 373,646,571</u>

## THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

## SOUTHERN ONTARIO SYSTEM

## STATEMENT OF OPERATIONS

for the Year Ended December 31, 1958

	Power System	Rural Power District	Total
	\$	\$	\$
<b>COST OF POWER:</b>			
Cost of power purchased .....	13,819,110	.....	13,819,110
Operation, maintenance and administrative expenses .....	43,479,589	11,672,050	55,151,639
Interest (including interest on funded debt and reserves, less interest earned on investments) .....	44,620,222	3,755,630	48,375,852
Frequency standardization:			
Interest .....	7,545,750	.....	7,545,750
Portion of cost written off .....	7,220,345	.....	7,220,345
Depreciation .....	10,667,517	7,607,127	18,274,644
Stabilization of rates and contingencies provision:			
Stream-flow variation .....	5,363,660	.....	5,363,660
Nuclear research .....	2,436,293	.....	2,436,293
Sinking fund provision—contribution to system capital .....	12,655,670	1,070,943	13,726,613
	147,808,156	24,105,750	171,913,906
Interchange of power with Northern Ontario Properties .....	3,509,062	.....	3,509,062
Sale of 25-cycle secondary energy (Note) .....	5,096,253	.....	5,096,253
Credit resulting from matured sinking fund .....	398,686	.....	398,686
	138,804,155	24,105,750	162,909,905
Cost of power supplied to Rural Power District ..	17,064,444	17,064,444	.....
Total, including provision for stabilization of rates reserve .....	121,739,711	41,170,194	162,909,905
<b>AMOUNTS BILLED:</b>			
Municipalities (at interim rates) .....	96,507,830	.....	96,507,830
Direct industrial customers and interconnected systems .....	27,974,067	.....	27,974,067
Local distribution system customers .....	85,978	.....	85,978
Rural customers .....	.....	41,437,483	41,437,483
Total .....	124,567,875	41,437,483	166,005,358
Excess of amounts billed over cost of power .....	2,828,164	267,289	3,095,453
Credited to municipalities on annual adjustment ..	2,828,164	.....	2,828,164
Credited to stabilization of rates reserve .....	.....	267,289	267,289

NOTE: In 1958 proceeds from the sale of 25-cycle secondary energy were deducted from the cost of power. In previous years these proceeds were included in amounts billed to direct industrial customers.

## NORTHERN ONTARIO PROPERTIES

*Held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario and municipalities supplied with power at cost*

**STATEMENT OF OPERATIONS**  
for the Year Ended December 31, 1958

	Customers served for the account of the Province of Ontario			Municipalities supplied with power at cost	Total
	Rural Power District	Other customers	Total		
<b>COST OF POWER:</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Cost of power purchased .....		607,086	607,086		607,086
Operation, maintenance and administrative expenses .....	1,744,883	10,998,925	12,743,808		12,743,808
Interest (including interest on funded debt and reserves, less interest earned on investments) ..	658,697	10,285,606	10,944,303		10,944,303
Frequency standardization:					
Interest .....		92,463	92,463		92,463
Portion of cost written off .....		283,572	283,572		283,572
Depreciation .....	964,801	2,409,294	3,374,095		3,374,095
Stabilization of rates and contingencies provision:					
General .....		829,732	829,732		829,732
Nuclear research .....		563,707	563,707		563,707
Sinking fund provision—contribution to system capital .....	182,853	2,907,764	3,090,617		3,090,617
	3,551,234	28,978,149	32,529,383		32,529,383
Interchange of power with Southern Ontario System .....		3,509,062	3,509,062		3,509,062
Sale of secondary energy (Note) ..		464,116	464,116		464,116
Credit resulting from prepaid and matured sinking funds .....		721,729	721,729		721,729
	3,551,234	31,301,366	34,852,600		34,852,600
Cost of power to municipalities supplied at cost .....		2,600,374	2,600,374	2,600,374	
Cost of power supplied to Rural Power District .....	2,252,427	2,252,427			
Withdrawal from stabilization of rates reserve .....				72,395	72,395
Total, including provision for, and withdrawal from stabilization of rates reserve .....	5,803,661	26,448,565	32,252,226	2,527,979	34,780,205
<b>AMOUNTS BILLED:</b>					
Municipalities supplied with power at cost (at interim rates) .....				2,566,847	2,566,847
Fixed-rate municipalities .....		2,194,997	2,194,997		2,194,997
Direct industrial and other customers .....		22,219,385	22,219,385		22,219,385
Local distribution system customers ..		2,695,297	2,695,297		2,695,297
Rural customers .....	5,577,341		5,577,341		5,577,341
Total .....	5,577,341	27,109,679	32,687,020	2,566,847	35,253,867
Excess or deficiency of amounts billed over cost of power .....	226,320	661,114	434,794	38,868	473,662
Credited to municipalities on annual adjustment .....				38,868	38,868
Transferred to Statement of Surplus ..			434,794		434,794

NOTE: In 1958 proceeds from the sale of secondary energy were deducted from the cost of power. In previous years these proceeds were included in amounts billed to direct industrial and other customers.

## Statement of Surplus for the Year Ended December 31, 1958

Balance at credit January 1, 1958 .....	\$ 725,611
Deduct allowance for additional depreciation on distribution and other facilities of the Rural Power District .....	761,515
Add net surplus from operations for the year ended December 31, 1958 .....	434,794
Balance at credit December 31, 1958 .....	\$ 398,890



# THE HYDRO-ELECTRIC POWER FUNDED DEBT AS AT

*Guaranteed as to principal and interest*

Date of maturity	Callable at par on or after	Date of issue	Interest rate
			per cent
January 1, 1960	January 1, 1955	January 1, 1945	3
March 15, 1960	March 15, 1959(e)	March 15, 1954	2.60
March 15, 1961	March 15, 1959(e)	March 15, 1954	2.65
February 15, 1962	.....	February 15, 1957	4¾
March 15, 1962	March 15, 1959(e)	March 15, 1954	2.70
March 1, 1963	March 1, 1961	March 1, 1948	3
March 1, 1963	March 1, 1962	March 1, 1955	3
March 15, 1963	March 15, 1959(e)	March 15, 1954	2.75
October 15, 1963	.....	October 15, 1958	4
March 15, 1964	March 15, 1959(e)	March 15, 1954	2.80
May 15, 1964	.....	November 15, 1957	5
May 15, 1964	May 15, 1962	May 15, 1954	3
July 2, 1964	July 2, 1960	July 2, 1948	3
October 15, 1964	October 15, 1963	October 15, 1956	4½
April 1, 1965	April 1, 1964	April 1, 1957	5
December 15, 1965	December 15, 1963	December 15, 1948	3
January 15, 1966	January 15, 1964	January 15, 1956	3¾
March 1, 1966	March 1, 1965	March 1, 1958	4
May 1, 1966	May 1, 1964	May 1, 1951	3½
January 15, 1967	January 15, 1965	January 15, 1952	4
March 15, 1967	March 15, 1964	March 15, 1953	4¼
April 1, 1967	April 1, 1965	April 1, 1949	3
April 1, 1967	April 1, 1964	April 1, 1947	2¾
November 1, 1967	November 1, 1964	November 1, 1952	4¼
November 1, 1967	November 1, 1964	November 1, 1952	4¼
January 15, 1968	January 15, 1966	July 15, 1949	3
April 15, 1968	April 15, 1966	April 15, 1952	4
October 1, 1968	October 1, 1965	October 1, 1947	2¾
July 15, 1969	July 15, 1966	July 15, 1953	4¼
July 15, 1969	July 15, 1966	July 15, 1953	4¼
November 1, 1969	November 1, 1967	November 1, 1949	3
January 1, 1970	.....	January 1, 1930	4¾
April 1, 1970	April 1, 1968	April 1, 1950	3
October 15, 1970	October 15, 1969	October 15, 1958	4½
May 15, 1971	May 15, 1956(a)	May 15, 1951	3¼
June 1, 1971	June 1, 1961	June 1, 1946	2¾
September 1, 1972	September 1, 1956(a)	September 1, 1951	3¼
June 15, 1973	June 15, 1971	June 15, 1950	3
July 15, 1974	July 15, 1972	July 15, 1956	4
October 15, 1974	October 15, 1972	October 15, 1956	4½
February 1, 1975	February 1, 1958	February 1, 1953	3¼
August 15, 1975	August 15, 1972	February 15, 1957	4¾
January 15, 1976	January 15, 1974	January 15, 1956	4
November 15, 1976	November 15, 1974	November 15, 1957	5
March 1, 1977	March 1, 1975	March 1, 1955	3½
April 1, 1977	April 1, 1974	April 1, 1957	5
March 1, 1978	March 1, 1976	March 1, 1958	4½
October 15, 1978	October 15, 1976	October 15, 1958	5
November 1, 1978	November 1, 1958(d)	November 1, 1953	3⅝
May 15, 1979	May 15, 1974	May 15, 1954	3½
October 15, 1979	October 15, 1974	October 15, 1954	3½
March 15, 1980	March 15, 1959(f)	March 15, 1954	3⅞
May 15, 1981	May 15, 1961(g)	May 15, 1956	3⅞

Total funded debt (at par of exchange) .....

## Summary of changes in funded debt

Outstanding at January 1, 1958.....
Less redemptions during year.....
Add new bond issues during year.....
Outstanding at December 31, 1958.....

*Payable in the*

Canadian.....
United States.....

(a) Callable at 101.

(b) Payable in U.S. funds.

(c) Held by Province of Ontario and having terms

identical with issues sold in the United States by the Province of Ontario, on behalf of the Commission.

(d) Callable at 102½. (e) Callable at a premium of ¼% for each year or fraction thereof between call-date and

## COMMISSION OF ONTARIO

DECEMBER 31, 1958

by the Province of Ontario (except issues marked \*)

## Principal outstanding December 31, 1958

Southern Ontario System	Northern Ontario Properties	Total
\$	\$	\$
.....	7,200,000	7,200,000
308,000(b)	.....	308,000*(b) (c)
3,861,000(b)	.....	3,861,000*(b) (c)
9,593,000	2,995,000	12,588,000
3,624,000(b)	.....	3,624,000*(b) (c)
23,564,000	7,343,000	30,907,000
23,220,000	.....	23,220,000
3,354,000(b)	.....	3,354,000*(b) (c)
13,300,000	6,700,000	20,000,000
3,240,000(b)	.....	3,240,000*(b) (c)
4,089,500	9,598,000	13,687,500
13,327,500	1,160,000	14,487,500
26,186,500	13,457,000	39,643,500
13,124,500	.....	13,124,500
16,487,500	1,757,500	18,245,000
43,671,000	.....	43,671,000
12,005,000	2,166,500	14,171,500
31,888,000	6,479,000	38,367,000
23,440,000	5,111,000	28,551,000
47,102,500	432,500	47,535,000
36,169,000	.....	36,169,000
11,463,000	32,244,000	43,707,000
10,678,455	3,996,545	14,675,000
20,258,500	1,812,000	22,070,500
33,064,000	.....	33,064,000
37,000,000	6,300,000	43,300,000
46,033,500	.....	46,033,500
13,450,000	5,800,000	19,250,000
34,132,000	.....	34,132,000
24,837,000	.....	24,837,000
38,000,000	11,500,000	49,500,000
11,700,500	.....	11,700,500
48,498,000	5,300,000	53,798,000
3,700,000	1,800,000	5,500,000
46,503,000(b)	2,890,000(b)	49,393,000*(b) (c)
13,745,000	4,290,000	18,035,000
43,307,000(b)	.....	43,307,000*(b) (c)
52,000,000	2,300,000	54,300,000
42,670,000	7,000,000	49,670,000
26,740,000	.....	26,740,000
47,861,000(b)	.....	47,861,000*(b) (c)
25,300,000	12,000,000	37,300,000
42,500,000	7,500,000	50,000,000
10,875,000	25,375,000	36,250,000
27,000,000	13,000,000	40,000,000
73,500,000	8,000,000	81,500,000
30,100,000	6,400,000	36,500,000
33,000,000	16,500,000	49,500,000
44,010,000(b)	5,000,000(b)	49,010,000*(b) (c)
31,500,000	3,500,000	35,000,000
41,975,000	8,000,000	49,975,000
29,920,000(b)	.....	29,920,000*(b) (c)
41,133,000(b)	3,320,000(b)	44,453,000*(b) (c)
1,388,008,955	258,227,045	1,646,236,000

## during year ended December 31, 1958

\$1,300,393,955	\$225,729,545	\$1,526,123,500
24,385,000	5,502,500	29,887,500
\$1,276,008,955	\$220,227,045	\$1,496,236,000
112,000,000	38,000,000	150,000,000
\$1,388,008,955	\$258,227,045	\$1,646,236,000

## following currencies:

\$1,120,887,955	\$247,017,045	\$1,367,905,000
267,121,000	11,210,000	278,331,000
\$1,388,008,955	\$258,227,045	\$1,646,236,000

maturity. (f) Callable at 103 prior to March 15, 1961, at  $\frac{1}{4}\%$  less during each three-year period prior to March 15, 1976, and thereafter at par. (g) Callable at 103 $\frac{1}{2}$  prior to May 15, 1963, at  $\frac{1}{4}\%$  less during each three-year period prior to May 15, 1978, and thereafter at par.

THE HYDRO-ELECTRIC POWER  
ADVANCES FROM THE PROVINCE OF

*Repayable to the Province in accordance with the terms of Province*

Date of maturity		Description	Interest rate
			per cent
May	15, 1959-1968.....	Annuity bonds	4
May	15, 1959-1970.....	Annuity bonds	4½
January	15, 1959-1971.....	Annuity bonds	4½
June	1, 1959-1971.....	Annuity bonds	4
May	1, 1959.....	Bonds	5
December	2, 1960.....	Bonds	5
Total advances (at par of exchange).....			

Summary of changes in advances from the Province

Balances of advances at January 1, 1958.....	
Less repayments during year.....	
Balances of advances at December 31, 1958.....	



## COMMISSION OF ONTARIO

## ONTARIO AS AT DECEMBER 31, 1958

*of Ontario bonds issued in part for the purposes of the Commission*

Balances of advances outstanding December 31, 1958  
*(Payable in Canadian, United States, or Sterling funds)*

Southern Ontario System	Northern Ontario Properties	Total
\$	\$	\$
4,890,813	330,321	5,221,134
4,241,552	1,027,930	5,269,482
2,413,474	592,850	3,006,324
3,062,326	1,130,134	4,192,460
11,129,972	2,328,952	13,458,924
11,510,295	2,583,807	14,094,102
<u>37,248,432</u>	<u>7,993,994</u>	<u>45,242,426</u>

## of Ontario during year ended December 31, 1958

\$38,283,884	\$8,193,609	\$46,477,493
1,035,452	199,615	1,235,067
<u>\$37,248,432</u>	<u>\$7,993,994</u>	<u>\$45,242,426</u>

## SECTION III

### THE COMMISSION'S CUSTOMERS

THE Commission's deliveries of energy in bulk amounted in total to 28,848,376,452 kilowatt-hours in 1958, an increase of 1.2 per cent over deliveries in 1957. Of this total 51.6 per cent was supplied to the 354 associated municipal utilities and 29 Commission-owned local distribution systems for the supply of their retail customers, and 8.6 per cent was delivered to the Commission's 103 rural operating areas for sale to rural customers. The remainder, which included 8,540,888,276 kwh of primary and 2,935,791,499 kwh of surplus energy, was supplied 11.0 per cent to certain interconnected utilities for resale and 28.8 per cent to a number of industrial customers served directly by the Commission. Comparative statistics for bulk deliveries in 1957 and 1958 are given in the table on page 115. These are supplemented on pages 116 and 117 by an analysis of the distribution of energy to ultimate customers of the Commission and its associated utilities.

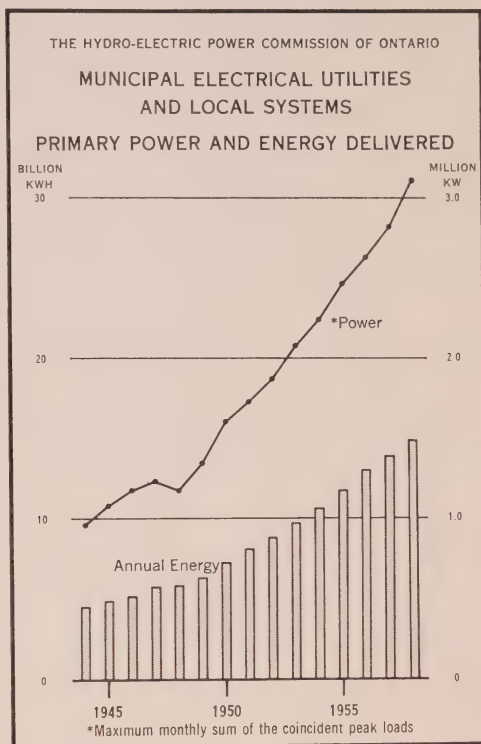
Commentary on the retail distribution of electricity is reserved, for the most part, for the municipal service supplement beginning on page 195. In that section of the Report the service provided through Commission-owned local systems is considered in conjunction with the activities of the municipal electrical utilities. The retail aspects of rural service, however, are discussed together with bulk supply to the rural operating areas in a subsection of Section III. Supporting statistics, the schedule of rates, and a brief description of the classes of service are to be found in Appendix III.

## MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

The number of municipal systems associated with The Hydro Electric Power Commission in its province-wide distribution of electricity was increased by four during 1958. The villages of Pickering and Deep River became cost-contract customers of the Commission on July 1 and August 1 respectively to bring the total number of municipalities served under cost contract in the Southern Ontario System to 327. Pickering was formerly supplied through the facilities of the rural distribution system and Deep River was served by Atomic Energy of Canada Ltd. In the Northern Ontario Properties the number of cost-contract customers was unchanged at 8, the number of fixed-rate municipal customers was raised to 19 when Rainy River on August 1 entered into an agreement to take power from the Commission, and White River was served by the Commission for the first time as a local system on March 18 bringing the number of local systems to 29.

The municipal utilities are billed monthly at an interim rate per kilowatt of peak load. The monthly peak load for any customer represents the maximum average demand over a period of twenty consecutive minutes in the month. As the system peak load usually occurs in December, the peak loads for that month are given for municipal systems in the table of load statistics in Appendix I. The sum of these loads in 1958 was 3,117,381 kilowatts, an increase of 10.4 per cent over the 2,824,187 kilowatts supplied in 1957. The energy supplied to the municipal utilities and local systems in 1958 was 14,889,000,611 kilowatt-hours, an increase of 7.0 per cent over the 13,910,368,728 kilowatt-hours supplied in 1957.

The full import of the part that Ontario Hydro plays in the Provincial economy can be gauged only when consideration is given to the Commission's relationship to the associated municipal utilities and their contribution in turn in providing electrical service to the ultimate customer. Their identity as separate units is preserved in the tables of statistics and financial reports that form the major part of the municipal service supplement beginning on page 195. The books of account from which the financial information is derived are kept by the utilities in accordance with a standard accounting system designed by the Commission for use by all its municipal customers.





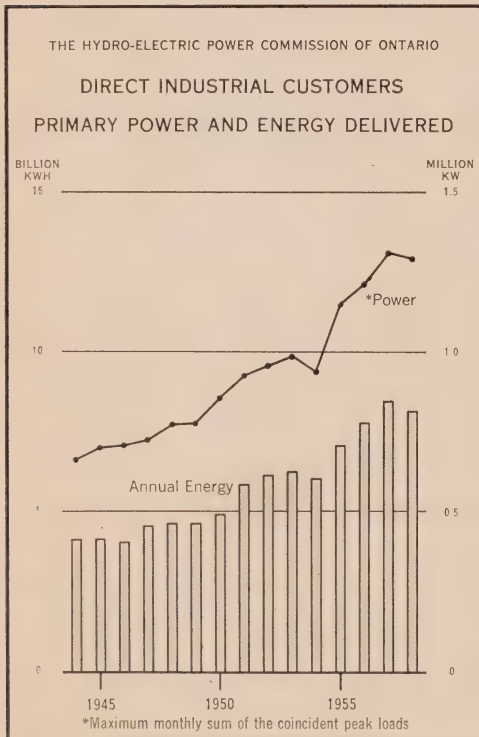
These books are periodically inspected by the Commission's municipal accountants and from time to time adjustments and improvements in accounting and office routine are recommended as the requirements of standardized methods may dictate. In many of the smaller municipalities much of the accounting is undertaken on behalf of the utilities by municipal accountants of the Commission. This type of work or supervision is directed towards ensuring the correct application of the standard accounting system and the uniform classification of revenues and expenditures, but it does not constitute an audit of the accounts.

Approval was given by the Commission to the reduction of retail rates in 79 utilities and local systems in view of their sound financial position and the current relationship of revenue and expense. It was necessary to increase retail rates in 8 municipal systems to enable them to meet their costs of operation.

### DIRECT INDUSTRIAL CUSTOMERS AND INTERCONNECTED SYSTEMS

The industrial customers served directly by the Commission include mines in relatively isolated areas, and industrial customers of many types whose requirements for power may exceed the supply capability of the local

rural or municipal facilities. In addition the Commission has contracts governing the supply or the interchange of power with certain independent utilities both within and beyond the borders of the Province. In the past, sales to these interconnected systems have been included in a miscellaneous category with sales to industrial customers. As power utilities they are not industrial customers of the Commission in the generally accepted sense. This year they have been excluded from the table of power and energy supplied to industrial customers and their loads have been deleted from the historical chart on this page. On the revised basis the number of direct industrial customers being supplied by the Commission at December 31, 1958 was 205 as compared with 209 at December 31, 1957.



The sum of the coincident primary peak loads of the Commission's industrial customers on the revised basis reached a monthly maximum of 1,292,918 in January 1958. This represents a decrease of 1.4 per cent from

### Primary Power and Energy Supplied to Direct Industrial Customers, By Types of Industry

Type of industry	Average of the monthly peak loads		Annual energy delivered		Increase or decrease
	1957	1958	1957	1958	
	kw	kw	kwh	kwh	per cent
Pulp and Paper.....	279,458	303,672	1,916,335,986	2,055,636,239	7.3
Mining:					
(a) Gold.....	85,570	87,544	573,939,308	585,592,708	2.0
(b) Silver and Cobalt.....	3,802	3,741	19,394,580	19,523,266	0.7
(c) Base Metals.....	221,886	197,466	1,535,692,618	1,302,267,006	15.2
(d) Uranium.....	40,547	87,455	250,475,754	591,132,117	136.0
(e) Non-Metals.....	6,150	6,495	28,908,098	28,598,881	1.1
Quarrying, Cement, and Basic Building					
Materials.....	40,851	40,539	245,695,773	234,504,442	4.6
Steel and Electro-Metallurgical.....	172,867	126,240	985,020,159	635,276,469	35.5
Abrasives.....	79,325	52,809	629,873,825	403,893,727	35.9
Chemical, Electro-Chemical, and Cyanamid....	203,155	209,854	1,580,934,727	1,614,423,720	2.1
Grain Elevators and Milling.....	8,084	8,232	29,332,210	31,524,890	7.5
Transportation Services and Communications..	7,867	7,806	38,338,502	32,192,107	16.0
Government Services and Institutions.....	23,484	22,300	113,900,363	128,294,169	12.6
General Manufacturing.....	93,750	96,441	435,674,754	419,565,834	3.7
Miscellaneous.....	10,415	7,073	58,221,734	35,471,660	39.1
Total.....	1,277,211	1,257,667	8,441,738,391	8,117,897,235	3.8

the September maximum of 1,311,247 in 1957. The annual kilowatt-hour consumption in 1957 and 1958 is given by types of industry in the accompanying table together with comparative figures on peak loads. Since peak load in any one month does not offer a reasonable basis for comparison of one industry with another, the table gives the average of the monthly peaks for each industry.

#### Analysis of Primary Loads by Types of Customer

Energy consumption by industrial customers served directly by the Commission declined by 3.8 per cent during 1958. Increases in consumption at rates somewhat below those in 1957 were registered by customers in the pulp and paper, mining, chemical and electro-chemical industries. The major contribution to the increase in mining loads was a 136 per cent increase in the uranium mining load. These increases, together with moderate increases in government services and in grain elevators and milling, were more than offset by a 35.5 per cent decline in loads in the steel and electro-metallurgical industry. The abrasives industry loads were also down by more than 35 per cent.

The corresponding primary peak and primary energy loads of the interconnected systems were 57,403 kilowatts in 1958 as compared with 59,746 kilowatts in 1957 and 422,991,041 kilowatt-hours in 1958 as compared with 424,841,154 kilowatt-hours in 1957. This represents a decrease in peak load of 4.0 per cent and a decrease in energy load of 0.4 per cent.

#### Surplus Energy Sales

Sales of surplus energy amounted in total to 2,935,791,499 kilowatt-hours, 2,737,537,938 kilowatt-hours being delivered to interconnected systems and 198,253,561 to direct industrial customers.

# RURAL ELECTRICAL SERVICE

The net increase during the year of 1,063 miles in rural distribution lines in service was a considerable advance over the 883-mile expansion in 1957. The growth in number of customers, 18,992 during 1958, was well below the 23,556 increase in 1957 reflecting a slackening in the rate of increase in hamlet service customers and a decline of 261 in the number of farm services. This decline is attributable in large part to the annexations of rural areas by expanding municipalities. This accounts also for the decline of nearly 5,000 residential service customers in the West Central Region; the increases in numbers of residential service customers in the other regions, however, were sufficient to offset this decline and to register a net increase of 11,545 customers in this class of service.

At the end of 1958 a total of 472,603 customers were being served over 46,438 miles of rural primary distribution lines. Farm service customers represented 29.7 per cent of the total number served while hamlet and rural residential service represented 43.9 per cent and summer service 18.1 per cent.

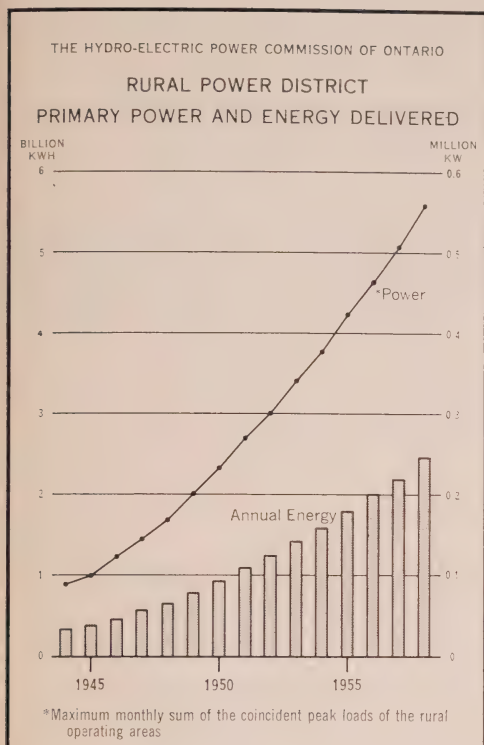
## Rural Power District

### NET INCREASE IN MILEAGE OF PRIMARY LINES AND NUMBER OF CUSTOMERS DURING 1958

System and Region	Miles of primary line	Number of customers							
		Farm	Residential		Com-mercial	Summer		Power	Total
			Rural	Hamlet		Com-mercial	Other		
SOUTHERN ONTARIO SYSTEM									
Western.....	55.74	124	3,495	869	217	40	187	22	3,216
West Central.....	92.18	203	3,067	7,847	144	14	247	59	4,925
Niagara.....	14.04	178	1,174	23	137	5	42	9	1,202
Toronto.....	23.62	386	2,169	92	150	2	116	24	1,931
Georgian Bay.....	235.13	119	4,647	2,802	195	73	2,321	9	4,324
East Central.....	237.94	65	4,503	2,505	139	66	1,702	14	3,984
Eastern.....	258.10	384	3,565	1,817	161	28	621	20	2,962
Total.....	685.15	313	22,620	15,725	855	214	5,004	39	12,694
NORTHERN ONTARIO PROPERTIES									
Northeastern.....	265.04	57	3,053	728	498	18	568	55	4,977
Northwestern.....	112.93	5	1,574	705	164	38	247	8	1,321
Total.....	377.97	52	4,627	23	662	56	815	63	6,298
Total—All systems.....	1,063.12	261	27,247	15,702	1,517	270	5,819	102	18,992

Italic figures indicate decreases.





### Load Growth

The monthly sum of the coincident peak loads of the rural operating areas was highest for the year in December when it reached 558,366 kilowatts. This represents an increase of 9.8 per cent over the maximum of 508,404 kilowatts in 1957. A corresponding increase in energy supplied to the areas raised the total by 12.7 per cent from 2,203,026,343 kilowatt-hours in 1957 to 2,482,696,066 kilowatt-hours in 1958.

All classes of rural service showed increases in consumption ranging from 7.8 per cent for farm service to 23.1 per cent for power service, and for all services these increases were proportionally greater than the corresponding increases in number of customers served. The average consumption

per customer, therefore, was substantially higher for all classes of service.



ELECTRICITY SERVES THE FARM — Electricity provides light and circulates fresh air in this modern dairy barn.



The major change was the 13.3 per cent growth in average consumption for power service.

Of the five classes of service, power service, with an 18.2 per cent increase, showed the largest growth in revenue.

#### **Capital Investment**

The net increase in the cost of rural distribution facilities amounted to \$13,977,056 in 1958. Of the total investment in rural distribution facilities at the end of the year amounting to \$238,908,547 the Province had contributed \$113,538,494.

### **REPORTS FROM THE REGIONS**

#### **Western Region**

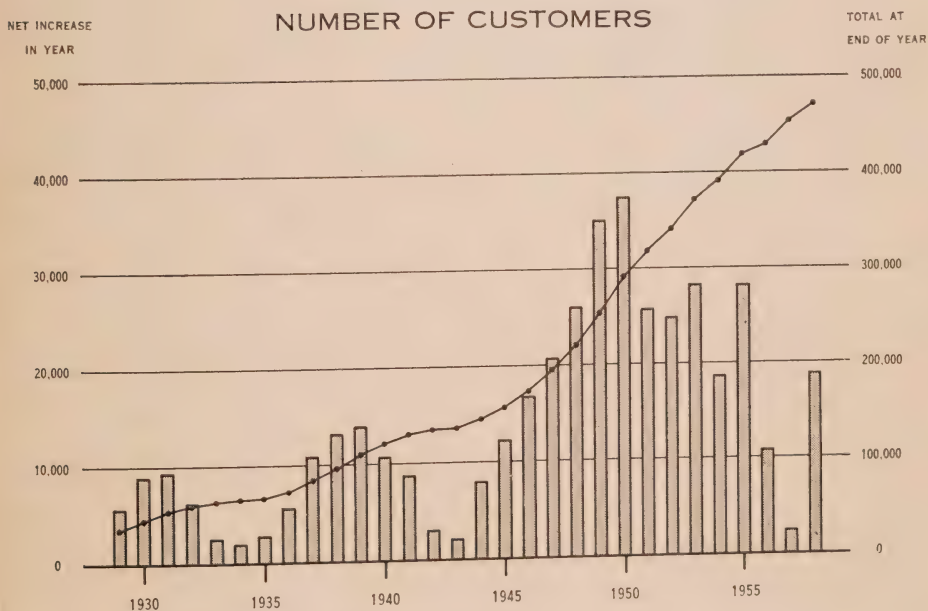
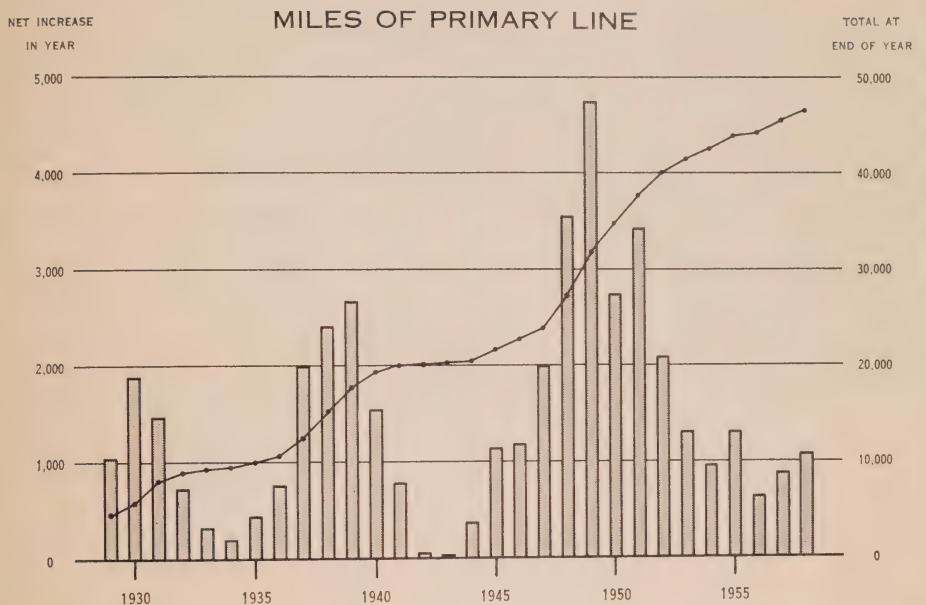
With the continuing growth of many municipalities in the Western Region the activities of municipal electrical utilities were expanded in 1958. In Chatham the municipal load was increased by 875 kilowatts when lines were extended to serve an industrial power customer, and additions were made to serve about 1,800 customers in an area annexed by the city at the turn of the year. Other municipal annexations were responsible



**ELECTRIC DAIRY EQUIPMENT** — Surrounded by electrically operated equipment required in modern dairying, a farmer prepares an electric milking machine for use.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

# RURAL POWER DISTRICT



for expansion by utilities in Blenheim, Ridgetown and St. Thomas. In Exeter new staff were appointed to carry out municipal operations, previously the responsibility of the staff of the Exeter Rural Operating Area.

Improvements to municipal electrical distribution systems included the construction of a number of transformer substations of harmonious and pleasing design. In St. Thomas a new 2,000-kva substation was built and two other stations were modernized. At Sarnia a 4,000-kva bungalow-type substation was placed in service. In London the capacity of one substation was doubled to 10,000 kva. Eventually the electrical network in the downtown area of London will have twice its present capacity. Other improvements included substantial extensions to distribution lines and the installation of additional street-lighting equipment.

Street-lighting in the commercial section of Wallaceburg was extended and modernized. Similar work was carried out during the year in Windsor, Ailsa Craig, Harrow, Strathroy and Tecumseh. In Lambeth the main street was lighted by new mercury-vapour units. New service buildings were constructed in Petrolia, Amherstburg, Hensall and Sandwich West.

Throughout the year municipal electrical utilities in the region continued an active and vigorous program of public relations. In conjunction with the Commission's province-wide promotional activities, customers in municipalities were encouraged to make greater use of electricity. Attractive water-heater rental plans were developed and put in operation. In Norwich, work was begun on the installation of a wired radio water-heater control system. New flat rates for water-heaters, which provide lower charges for fast-recovery heaters, were adopted in 26 municipalities in the region. A recently built electrically heated house was favourably regarded by prospective purchasers in Amherstburg. Rates for heating houses electrically were established in 24 municipalities; general rate changes in 18 municipalities also encouraged the greater use of electricity.

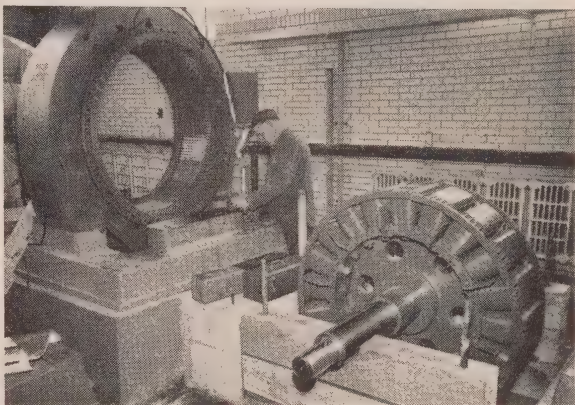
As a result of these activities the excellent relations between the utilities and their customers were maintained while the application of electricity in modern living was demonstrated in a practical manner.

### **West Central Region**

General retail rate reductions were effected in fifteen municipalities in the region during 1958, while special rates for house heating and new rates for flat-rate water-heaters were adopted by a large number of electrical utilities. These efforts to encourage the wider use of electricity were supported by numerous additions and improvements to municipal electrical distribution systems. Transformer capacity was increased with the placing in service of substations at Acton, Brantford, Brantford Township, Galt and Hamilton. A number of municipalities also carried out work designed to improve street-lighting standards. In Hamilton, for example, a total of some 1,300 lighting units together with arrangements and connections for the new Skyway suspension bridge were installed. Similar work on a



reduced scale was carried out in Brantford, Hagersville, and Wellesley. Several other electrical utilities replaced incandescent lighting units on main thoroughfares with fluorescent or mercury-vapour lighting. In most municipalities rebuilding and rehabilitation of distribution systems, which were carried out in conjunction with frequency standardization operations, were completed during the year as the standardization program drew to a close. Other improvements included the removal of overhead distribution lines and the development of underground distribution systems. At Brantford a beginning on an underground system was made in the business area of the town where three transformer vaults were installed below ground level. In Hamilton, customers previously supplied from the 6,600-volt underground system were transferred to the 4,160-volt distribution system. Underground cables were also installed to supply 15,000 kilowatts to a large industrial power user in the city.



FREQUENCY STANDARDIZATION — A large electric motor in the process of being rewound for operation at 60 cycles.

Municipalities which annexed adjacent areas were required to carry out extensive planning to provide for the incorporation of large numbers of customers into their distribution systems. The entire Township of Nelson and a section of East Flamboro Township were annexed by Burlington, involving the transfer of 8,200 rural customers and approximately 190 miles of rural primary line. Similarly in Saltfleet Township, adjacent to Hamilton, some 660 acres were annexed by the city. This in turn involved the transfer of 164 customers and 223 miles of rural primary line to the municipal system. An annexation took place also at Kitchener where 407 customers were taken over by the municipality.

In general, municipalities in the region stressed the benefits available to customers through the greater use of electricity, particularly for residential purposes. This was the keynote of their activities during the year, and resulted in an expanded water-heater program as well as the introduction of favourable rate changes.

### Niagara Region

During 1958, municipal substation capacity was increased at Merritton by 3,000 kva and at Niagara Falls by 2,500 kva. New substations were placed in service in these municipalities to meet increased loads, which resulted largely from service to several new housing developments. Improvements were made also to street-lighting in Niagara-on-the-Lake, Stamford



SIR ADAM BECK-NIAGARA GENERATING STATION NO. 2 — This view of the generator floor shows the exciters of the 16 units in service at the station. The final two units were installed during 1958.

Township, Welland, and Port Dalhousie, where modern fluorescent lighting units were installed. During the year new administrative offices were provided at Port Colborne and Thorold. At Welland a substation building was remodelled and equipped for use as a storehouse and service centre. The extensions and improvements to municipal distribution systems generally, which were carried out in conjunction with the regional frequency standardization program, were completed with the standardization of the Niagara Falls filtration plant.

A general reduction in retail rates was put into effect in Port Dalhousie during the year, and five municipalities in the region introduced special rates for house heating. New rates for flat-rate water-heaters were adopted in two other municipalities.

### **Toronto Region**

The high density of population in the Toronto Region, which provides a constantly growing market, accounted for the substantial increase in the number of electrical services provided and the need for expanded transformation capacity.

The total number of customers served by municipal electrical utilities in the region reached approximately 505,000 by the end of the year, an increase during the year of about 7 per cent. Almost a third of this increase



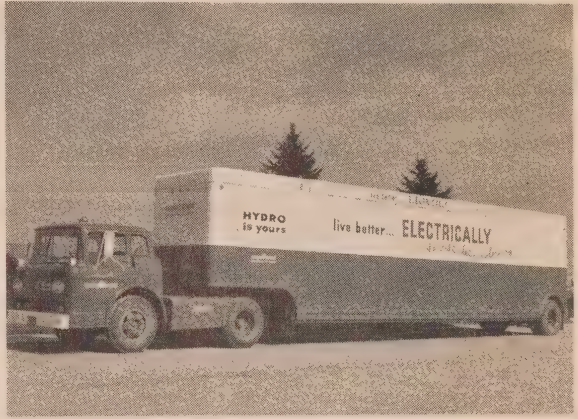
was in North York Township, where over 10,000 new customers received service in 1958. Seven of these new customers were industrial users requiring large blocks of power at 27.6 kv. In Scarborough Township an additional 8,200 services were installed and in Etobicoke Township 4,600 new customers were supplied. Comparable growth was registered also in the smaller municipalities. Richmond Hill with a population of less than 11,000 added 700 new customers. Elsewhere throughout the region a further 8,000 new customers were supplied with power.

Increased demands for power were met by the placing in service of additional transformation facilities. In the area of Metropolitan Toronto alone 11 substations with capacities of 4,000 to 5,000 kva were constructed by municipal utilities. The combined 25- and 60-cycle peak demand in Toronto in 1958 amounted to 569,099 kilowatts, an increase of approximately 2 per cent over that of 1957.

The 60-cycle peak demand of the system was 541,900 kilowatts, about 18 per cent greater than in 1957. The growth in 60-cycle demand in part reflects the progress of frequency standardization operations in the city. Customers still served at 25-cycle frequency in the northern part of the city and in Leaside will have their equipment changed to 60-cycle operation by July 1959.

In order to provide the administrative services required, a number of municipalities in the Toronto Region built new offices, garages, or warehouses. Substantial building was carried out in Brampton, East York Township, Forest Hill, and Weston. A number of municipalities promoted the use of flat-rate water-heaters. Direct sales and rental programs for water-heaters were undertaken by municipal utilities in Weston and the Townships of East York, Etobicoke, Toronto and Trafalgar. An added inducement to the customer to increase his use of electricity was the offer of free service on electrical components of water-heaters put forward by several municipalities.

During the year, retail rate adjustments were made in seven municipalities in the region. In addition 19 municipal electrical utilities adopted a special house-heating rate for residential services, while 14 utilities introduced new schedules of rates for flat-rate water-heaters.



This information trailer fitted with a variety of electrical appliances will be used to demonstrate the many applications of electricity to modern living.



## **Georgian Bay Region**

New loads in the Georgian Bay Region in 1958 required the installation of additional transformer capacity in Collingwood, Hanover, Midland and Walkerton. Further improvements to municipal distribution systems were carried out at Lucknow where radial-wave-type street lights were replaced by fluorescent luminaires, and in Bracebridge where lighting in the main business area was modernized with 400-watt mercury-vapour units. In Tara the voltage on the municipal system was changed from 4,160/2,400 volts to 8,320/4,800 volts during the year. In this way the construction of an additional distributing station was avoided and satisfactory voltage regulation was provided. A high-frequency control system was placed in operation in Meaford early in 1958 for the control of flat-rate water-heaters.

Considerable interest in electric heating equipment was evident among a large number of customers in the region in 1958. In the course of the year 11 installations of major electric heating equipment were made. Adjustments to retail rates were put in effect in 12 municipalities, thereby providing for lower costs to the ultimate customer. In addition 36 municipal utilities adopted the revised rates for electric house-heating, and 9 utilities reduced flat-rate water-heater rates.

## **East Central Region**

Municipal electrical utilities in the East Central Region continued a vigorous program of expansion during 1958 which resulted in improved service to their customers and greater efficiency of operation. An extensive program of work undertaken in Trenton eliminated the 6,600-volt supply of power from Sidney Generating Station so that all power was delivered to the municipality at 44 kv. This work required the rebuilding of two municipal substations as well as the construction of new 44-kv lines. In Kingston greater service security was provided for customers in the western section of the city when a 44-kv tie-line from Frontenac Transformer Station was placed in service. In addition a new substation with an initial capacity of 3,000 kva was built there. Transformation capacities were increased also in Cobourg where the municipal utility purchased a 4,000-kva substation from the Commission, and in Whitby when a new 5,000-kva substation relieved overloads on the municipal system. A substation in Oshawa recently purchased from the Commission will be rebuilt shortly to a capacity of 10,000 kva. A 44-kv transmission line built by the Commission from Ross L. Dobbin Transformer Station was tied into the municipal distribution system of Peterborough to provide a third source of power supply to the city. Security there was further increased by the installation of two automatic reclosing outdoor circuit-breakers on the 44-kv lines. During the year the distribution systems of Millbrook and Warkworth were completely rehabilitated. Major improvements were made also to lighting systems in Brighton and Picton. Both these municipalities installed modern fluorescent or mercury-vapour luminaires on main thoroughfares. Administrative quarters were expanded in Ajax, where office workers moved to a spacious new building.

The first installation of electric house-heating equipment in the region was made at Oshawa. The model home in which the equipment was installed was open to public inspection. A substantial market for electrically heated houses is expected to develop in this area. Special rates for house heating were introduced by 22 municipalities during the year and general retail rate adjustments were made to customers of 8 municipal utilities. Thirteen municipalities also adopted the new rate schedules for flat-rate water-heaters.

Beginning July 1, 1958 the village of Pickering was supplied with power at cost by the Commission. Previously it had been served through rural facilities. The load on the municipal system is about 600 kilowatts.

### **Eastern Region**

The construction of the St. Lawrence Power project overshadowed other activities in the Eastern Region during 1958. Most municipal electrical utilities, however, were active in carrying out plans to improve their distribution systems. In Ottawa the number of customers served at the end of the year was 80,521, an increase of 4 per cent over the number in 1957. Increasing demands for power in the city were met by extending distribution lines and increasing the transformation capacity available.



**ST. LAWRENCE POWER PROJECT**—The Village of Morrisburg lies close to the new shoreline of the St. Lawrence River. The raising of the headpond level required the relocation of the eastern section of the village, and the establishment of the entire commercial area in the new shopping centre shown in the foreground.





**ST. LAWRENCE POWER PROJECT** — The Village of Long Sault is one of two new municipalities created as a result of the construction of the project. It incorporates the former villages of Mille Roches and Moulinette.

Three new substations with a total capacity of 26,000 kva were placed in service. Nine miles were added to the underground cable circuits and some 3 miles of duct line were installed. Electrical utilities in other municipal centres also carried out projects to improve service to customers. At the municipal generating station in Almonte the utility arranged for the installation of control equipment which would automatically close down operations in the event of trouble. Transformation capacity at the utility's substation was increased by the addition of a 2,000-kva transformer. During the year the number of customers in Brockville was substantially increased when the city annexed part of a neighbouring township. A 3,000-kva substation was constructed at this time to assist in meeting demands for power and as the first step in the conversion to a grounded distribution system. Rehabilitation programs were undertaken in Richmond and Rockland where improvements to street-lighting arrangements were also made. A number of utilities improved street-lighting by installing mercury-vapour units. In Ottawa alone 480 new lighting units were installed.

On August 1, 1958 the Improvement District of Deep River became a cost-contract customer of the Commission. Previously power had been supplied to the municipality by Atomic Energy of Canada Limited. In order to serve Deep River, power was stepped down from 115 kv to 12 kv. A municipal substation stepped the power down further for supply to the local distributing system.



During the year, adjustments to general retail rates were made in 18 municipalities in the region. Special rates for house heating were introduced by 5 municipal electrical utilities while 6 adopted the new rate schedules for flat-rate water-heaters.

### Northeastern Region

Customers in a number of municipal centres are served directly by the Commission and in these the Commission's regional staff continued a program of work to expand and improve service during 1958. Transformation capacities were increased in Schumacher, South Porcupine, Swastika and Timmins. In Blind River and Mattawa, Commission forces carried out improvements to the distribution systems, and in New Liskeard established a multiple street-lighting system. Similar work was also carried out in other municipalities during the year by the local commissions. Mercury-vapour street-lighting units were installed in Cache Bay, Capreol, Kapuskasing, Sudbury and Thessalon. Retail rates were reduced in five municipal systems and increased in two. In Kapuskasing an off-peak control system for flat-rate water-heaters was installed. Five utilities introduced the new flat-rate water-heater schedules. The 25-cycle equipment of customers in the region was standardized for 60-cycle operation during the year. Preparatory work had been begun during 1957 and in February 1958, standardization crews began the work of conversion. By mid-August operations were completed and all municipal and rural customers in the northeast were being supplied at 60 cycles.



OTTER RAPIDS — Down stream from the site of the new station on the Abitibi River, preparatory work for a construction camp is in progress. The Bailey bridge provides access to the work area.



**SILVER FALLS GENERATING STATION**—A 350-foot fall in a stretch of the Kaministiquia River provides the head for this single-unit generating station. A tunnel almost 2 miles in length will carry water from Dog Lake to the station. The surge tank tower in the middleground marks the location of the tunnel.

### **Northwestern Region**

Transformer station capacity in Port Arthur was increased in 1958 to meet requirements for additional power. A new 4,000-kva substation was placed in operation in the city, and the capacities of two other stations were doubled during the year. Improvements to the municipal distribution system in Nipigon Township were also carried out, and modern street-lighting equipment was installed. General improvements were made in other municipalities in the region, all of them designed to provide better service to customers. The Atikokan municipal load was increased by 1,300 kilowatts when arrangements were completed to supply a new industrial customer.

Two more municipalities in the region became customers of the Commission in 1958, White River as a local system and Rainy River under a fixed-rate agreement. Retail rates to customers in Schreiber Township were reduced and new rates for flat-rate water-heaters in Port Arthur were introduced. Two other municipalities established new rates for house-heating equipment.

### **PUBLIC RELATIONS AND SERVICES TO CUSTOMERS**

Several events of favourable significance combined during 1958 to engender unusually high public interest in the Commission's affairs. As a prime example, the international aspect and the broad economic implications of the St. Lawrence Power Project focussed attention on ceremonies



marking the flooding of the headpond in July and the official opening of Robert H. Saunders-St. Lawrence Generating Station in September.

A public-speaking contest, sponsored throughout the Province jointly by the Commission and the Ontario Educational Association, evoked a widespread and enthusiastic response on the part of primary and secondary pupils seeking information on the Commission's activities and the relation of these activities to the everyday applications of electric power. In this way, and through the favourable publicity that subsequently developed, the contest admirably reinforced the "Live Better Electrically" program. This program, inaugurated in December 1957, was widely publicized during 1958 with the support of supplementary promotional programs by the municipal utilities. It is being continued and extended during 1959.

More than a million persons visited power developments and other engineering projects of the Commission during the year. The interest of the public at large was met by the distribution of a number of publications such as the monthly issues of *Hydro News*, by the showing of documentary films, and by informational addresses by various members of the Commission and the staff.

#### **Industrial Surveys**

Eighty-seven industrial power-factor surveys were carried out for customers served either by the Commission or the municipal utilities. Frequently the installation of capacitors by the customer will result in a reduction in his power bill, and in turn benefit the local utility and the Commission by improving the system power factor. Following the surveys, the Commission made recommendations for the installation of a total of 8,737 kva of capacitors.

#### **Lighting**

The services of lighting specialists were made available to customers with problems of lighting schools, offices, churches, public buildings, industrial and commercial locations, or with plans to improve street lighting or to provide flood-lighting for various purposes. Plans and specifications were drawn up for 273 lighting installations, 110 of these being for schools.

#### **Inspection**

Electrical installations are governed by regulations made by the Commission under The Power Commission Act. Each installation must be covered by a permit and approved by an inspector before being connected to the power supply. A revised edition of *Electrical Inspection Regulations* was published during the year, incorporating changes recently introduced into



the Canadian Electrical Code, Part I. These amendments deal more specifically with installations in anaesthetizing areas in hospitals, outdoor flood-lighting, fixed electric space-heating, induction and dielectric heating, and with sound recording and reproduction.

The Commission is also constantly vigilant in establishing and maintaining standards for the manufacture of electrical equipment. Every effort is made to prevent the sale or use of any such equipment that is known to be unsafe.

The evidence of electrical inspection indicates that 10 fatal accidents and 8 fires in the Province were directly attributable to electrical causes during the year. In a number of other fires investigated, damage to buildings was extensive, and it was not possible to establish conclusively that defective wiring was or was not a contributory cause of these fires.

## SECTION IV

### FREQUENCY STANDARDIZATION

BY the end of 1958 the Commission's program of frequency standardization, now in its tenth year, was nearing completion. In 1957 the program had been extended to include standardization of 25-cycle areas in the Northeastern Division. The area of the Province in which power was supplied at 25-cycle frequency, originally some 12,000 square miles in extent in the Southern Ontario System alone, had been reduced to about 20 square miles in North Toronto and Leaside. A few large industrial plants will continue to be supplied as originally planned at the lower frequency, but by July, 1959, the standardization of all customer-owned equipment, with these few exceptions, will be essentially completed. The year under review, therefore, is the last full year of operation in the frequency standardization program.

In the beginning it was estimated that some 784,000 customers would be involved, that on the average there would be 2.7 frequency-sensitive items to be standardized or replaced for each domestic customer and that the program would be completed in 1964. In the years that followed, the program was subject to almost continuous expansion, first because of population growth within the Province, and second because of the remarkable increase in the variety of frequency-sensitive items in use. This increase is reflected in the average of 5.8 frequency-sensitive items per domestic customer encountered in the Toronto area during the past year.

Throughout the period of the program the cost of labour and materials has continued to rise. The effect of these increases in costs has been alleviated to some extent by economies in operation and in methods of standardization which have been developed as the program progressed. With the equipment of 98 per cent of the total customers in the program standardized at the end of December 1958, the total expenditure on frequency standardization work by the Commission for the work done since the inception of the program was \$339,838,694.

At the beginning of 1958, work was being carried out from bases in Toronto, Simcoe, Brantford, and the Niagara Region. Upon completion of the work in the Simcoe area in February, the work force there moved to

**PROGRESS OF FREQUENCY STANDARDIZATION  
BY CLASSES OF SERVICE**

Class of service	Services standardized		Customer moves		Frequency-sensitive items standardized	
	During 1958	Total to Dec. 31, 1958	During 1958	Total to Dec. 31, 1958	During 1958	Total to Dec. 31, 1958
<b>Domestic:</b> Southern Ontario System .....	50,989	739,493	.....	.....	308,238	3,887,766
Northeastern Division .....	17,722	17,722	.....	.....	78,847	78,847
Total domestic .....	68,711	757,215	7,997*	138,080*	387,085	3,966,613
<b>Commercial:</b> Southern Ontario System .....	6,800	87,573	.....	.....	99,040	1,019,751
Northeastern Division .....	2,365	2,365	.....	.....	24,600	24,600
Total commercial .....	9,165	89,938	344*	2,898*	123,640	1,044,351
<b>Power:</b> Southern Ontario System .....	1,562	14,843	.....	.....	43,778	813,655
Northeastern Division .....	191	191	.....	.....	2,094	2,094
Total power .....	1,753	15,034	30*	498*	45,872	815,749
Total Southern Ontario System .....	59,351	841,909	.....	.....	451,056	5,721,172
Total Northeastern Division .....	20,278	20,278	.....	.....	105,541	105,541
Grand Total .....	79,629	862,187	8,371*	141,476*	556,597	5,826,713

\* These figures combine customer moves chargeable to the program in the Southern Ontario System with those chargeable to the program in the Northeastern Division.

the Northeastern Region where preparations had been made during 1957 to extend the benefits of frequency standardization to customers not originally included in the program. During the ensuing six months this work group completed the standardization of the equipment of some 20,000 customers over a wide area of the region. As work was completed in each of the areas, the base offices were closed, leaving only the North Toronto crews operating at the end of the year.

All the techniques for achieving economies in standardization work which have proved so effective over the past years are being continued and extended in their applications.

Just over a third of the more than 150,000 motors used during 1958 in the standardization of customers' equipment were 25-cycle motors rewound for 60-cycle use. About 40 per cent of the rewinding was done in the Commission's Service Shop at the A. W. Manby Service Centre. The Service Shop also did the necessary work on about half the 11,000 salvaged controls for oil burners, timers, and other components when these controls



were changed over for 60-cycle operation. The need for this kind of service declined sharply during the year as operations tapered off and material requirements for the balance of the program had been largely provided for. The Service Shop was therefore closed on July 25 after more than eight years' operation. In this eight-year period approximately 220,000 single-phase and 46,000 polyphase motors had been changed over to 60-cycle frequency in addition to a large number of miscellaneous items.

More than 5,000 salvaged motors that could not be economically re-wound were sold during the year. Over 57,000

meters of various kinds were changed over for 60-cycle operation in the Meter Shop at A. W. Manby Service Centre. Other motors and components that could not be reclaimed for use were sold as scrap to the extent of some 7,000 tons.

The financial aspects of the standardization program are discussed elsewhere in the Report (see page 23). One item on the Commission's balance sheet, the inventory of equipment and material, is closely related to the work program. Every effort is being made to ensure that the substantial stores inventory which it has been necessary to maintain will be reduced to a minimum at the end of the program, and arrangements have been made with major suppliers for the return of surplus up-to-date equipment after the work has been completed.



**FREQUENCY STANDARDIZATION** — Technicians in the meter and relay shop calibrate metering equipment during standardization operations.

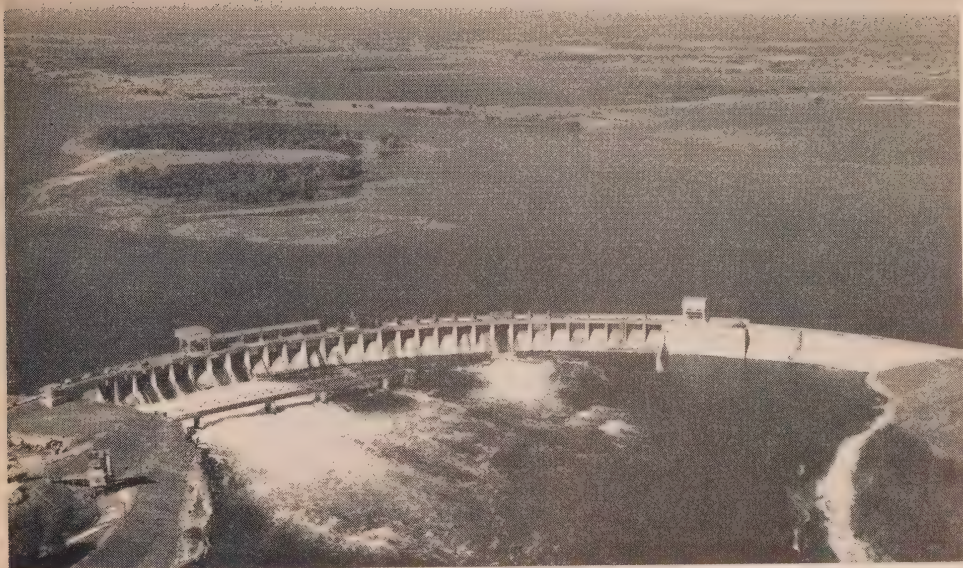
## SECTION V

### PLANNING, ENGINEERING, AND CONSTRUCTION

ON September 5, 1958 the international powerhouse structure which is the central feature of the St. Lawrence Power Project was officially placed in service by the Hon. Leslie M. Frost, Prime Minister of Ontario, and the Hon. W. Averill Harriman, Governor of New York. The proceedings marked the completion of just over four years of extensive construction activity on the part of the Commission and the Power Authority of the State of New York as joint participants in the Project. The Commission's generating station forming the Canadian half of the powerhouse structure, when it is complete, will have an installed capacity of 940,000 kilowatts. The production of power from the waters of the St. Lawrence River has been the goal of some 50 years of study and negotiation. The attainment of this objective marks the end of hydro-electric development on a large scale in the Southern Ontario System.

#### System and Program Planning

The Commission, at the end of 1958, was engaged in the construction of generating station developments which will increase the capacity of its resources by more than two million kilowatts during the four-year period to the end of 1962. Nearly two-thirds of this increase will be in thermal-electric generation. Of the hydro-electric capacity at present in the construction program, over two-thirds will be progressively placed in service during 1959 as the Robert H. Saunders-St. Lawrence Generating Station



ST. LAWRENCE POWER PROJECT — In conjunction with the powerhouse, the Long Sault dam, a curved-axis spillway, some 2,960 feet in length, controls the level of the water in the headpond. Up stream from the dam high points of land have become islands in the headpond.

is brought to completion. There are still a number of hydraulic sites in the north which may eventually lend themselves to economic development, but there is no likelihood that, taken by themselves, they can be simultaneously exploited in sufficient numbers to meet the present high annual rate of growth in demands for power. The Commission proposes, therefore, to meet load growth by co-ordinated development of thermal-electric stations and those remaining hydraulic sites which prove economically feasible.

Present planning assumes that there will be no additional hydraulic developments in the northwestern part of the Province until after the placing in service of the first 100,000-kilowatt unit at Thunder Bay Generating Station. In southern Ontario most of the remaining undeveloped power sites are in the eastern part of the Province. Transmission lines from this area are already heavily loaded for the transmission of power from the Robert H. Saunders-St. Lawrence Generating Station and from Quebec suppliers to areas of heavy load in central Ontario. The development of new generating capacity in the eastern part of the Province will likely be deferred, therefore, until local loads are sufficient to make use of the additional power. This will avoid the necessity of adding materially to high-voltage transmission lines.

In the Northeastern Division of the Northern Ontario Properties a number of hydraulic sites are expected to prove economic for development. With the present interconnection between the Division and the



**Summary of Ontario Hydro's Power Development Program—1945-1962  
as at December 31, 1958**

<i>System and Development</i>	<i>No. of units</i>	<i>In service</i>	<i>Capacity*</i> kw
<b>SOUTHERN ONTARIO SYSTEM</b>			
DeCew Falls (extension)—Niagara Region.....	1	1947	57,000
Stewartville—Madawaska River.....	3	1948	63,000
Des Joachims—Ottawa River.....	8	1950—1951	372,000
Chenau—Ottawa River.....	8	1950—1951	117,000
Richard L. Hearn—Toronto.....	4	1951—1953	400,000†
	4	1959—1960	800,000†
J. Clark Keith—Windsor.....	4	1951—1953	264,900†
Otto Holden—Ottawa River.....	8	1952—1953	210 000
Sir Adam Beck No. 2—Niagara River.....	16	1954—1958	1,200,000†
Pumping Generating Station.....	6	1957—1958	170,000†
Robert H. Saunders—St. Lawrence River.....	7	1958)	940,000†
	9	1959)	
Nuclear Power Demonstration—near Des Joachims GS	1	1961	20,000†
Lakeview—near Toronto.....	2	1961—1962	600,000
<b>NORTHERN ONTARIO PROPERTIES</b>			
<b>NORTHEASTERN DIVISION</b>			
George W. Rayner—Mississagi River.....	2	1950	47,000
Abitibi Canyon (extension)—Abitibi River.....	1	1959	45,000
Red Rock Falls—Mississagi River.....	2	1960—1961	38,000
Otter Rapids—Abitibi River.....	3	1961—1962	131,000
<b>NORTHWESTERN DIVISION</b>			
Ear Falls (extension)—English River.....	1	1948	6,000
Aguasabon—Aguasabon River.....	2	1948	44,000
Pine Portage—Nipigon River.....	4	1950—1954	119,200
Manitou Falls—English River.....	5	1956—1958	65 700
Caribou Falls—English River.....	3	1958	67,500
Whitedog Falls—Winnipeg River.....	3	1958	53,700
Cameron Falls (extension) Nipigon River—.....	1	1958	19,100
Alexander (extension)—Nipigon River.....	1	1958	11,300
Silver Falls—Kaministiquia River.....	1	1959	45,500
Thunder Bay—Fort William.....	1	1961	100,000†

\*Capacities quoted are dependable at time of system peak except those marked †, which are installed capacities.

Southern Ontario System the output of these sites could be used to meet loads in either or both operating systems. The actual capacity that can be derived from many of these potential sites will be established only upon completion of detailed field work and analysis of the economics involved. Present information indicates that a total capacity of approximately 1.2 million kilowatts may be obtained from sites on the Abitibi, Mattagami, Missinaibi, Mississagi, Montreal, and French Rivers. Investigation of these resources is continuing in 1959. Most of the power potential is concentrated in the area north and west of Abitibi Canyon Generating Station, and transmission of the power from these sites to load centres is expected to require a voltage greater than the present maximum of 230 kilovolts in use in Ontario. Extra-high voltages in the range of 345 to 460 kv are being studied. Information on technical investigations into these extra-high voltages is given on page 98.

In 1958 the Commission decided to proceed immediately with two of these Northeastern Division sites, Otter Rapids on the Abitibi River and

## Expenditures on Capital Construction by Fiscal Years 1946-1958

	Genera- tion	Transfor- mation	Trans- mission	Rural	Other	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1946.....	6,160	4,184	3,980	4,942	320	19,586
1947.....	20,725	9,587	7,892	6,672	961	45,837
1948.....	48,122	12,839	14,369	13,514	1,833	90,677
1949.....	79,472	19,172	22,061	23,827	5,584	150,116
*1950.....	86,637	28,025	30,346	19,521	6,951	171,480
1951.....	94,267	25,143	17,886	22,725	4,597	164,618
1952.....	96,682	22,954	15,628	23,033	4,534	162,831
1953.....	117,311	21,711	15,444	24,402	4,767	183,635
1954.....	76,649	15,360	16,091	20,133	4,585	132,818
1955.....	68,483	12,624	10,823	18,961	3,681	114,572
1956.....	128,245	13,454	11,424	17,244	2,626	173,003
1957.....	151,738	17,302	19,295	17,347	3,010	208,692
1958.....	126,204	20,688	20,806	19,556	3,402	190,656
Total 1946-58.....	1,100,695	223,053	206,045	231,877	46,851	1,808,521

\*14-month fiscal period

Red Rock Falls on the Mississagi River. Initially power from Otter Rapids will be incorporated into the 115-kv system at Abitibi Canyon Generating Station. Subsequently this power will be incorporated into the extra-high voltage transmission system, which will probably be associated with the development of additional facilities in the area.

The eight generating station projects where construction is going on at present are Robert H. Saunders Generating Station on the St. Lawrence River, Silver Falls Generating Station on the Kaministiquia River, Otter Rapids and Abitibi Canyon Generating Stations on the Abitibi River, Red Rock Falls Generating Station on the Mississagi River, and three thermal-electric stations—Richard L. Hearn and Lakeview Generating Stations in the Toronto area and Thunder Bay Generating Station at Fort William. Brief progress reports for all but the first of these developments are included in this section of the Report. More comprehensive descriptions are given for Robert H. Saunders-St. Lawrence, Whitedog Falls, and Caribou Falls Generating Stations, all of which were initially placed in service during 1958.

#### Survey Work

In connection with these potential sites and other survey work, approximately 1,250 line miles of aerial photographic survey were completed on scales varying from 400 to 2,000 feet to the inch. In field operations, extensive use was made of mosaics which in total represented some 9,000 square miles of photographed territory.

An experimental survey for a 35-mile stretch of proposed 115-kv transmission line from Maynard Falls on the English River to Hawk Lake

## Total Mileage of Transmission Lines and Circuits

Voltage and Structure	Line route or structure miles		Circuit miles	
	At Dec. 31, 1957	At Dec. 31, 1958	At Dec. 31, 1957	At Dec. 31, 1958
SOUTHERN ONTARIO SYSTEM				
230,000-volt.....steel tower.....	2,612.28	2,827.15	3,208.23	3,551.28
115,000-volt.....steel tower.....	1,552.27	1,558.59	2,394.80	2,407.86
115,000-volt.....wood pole.....	934.04	939.85	938.65	944.46
115,000-volt.....underground cable	17.11	19.35	38.67	43.15
60,000-volt.....steel tower.....	11.17	11.17	12.30	12.30
60,000-volt.....wood pole.....	2.66	3.31	2.66	3.31
44,000-volt and less. wood and steel...	4,696.17	4,725.01	5,222.11	5,228.66
Total Southern Ontario System...	9,825.70	10,084.43	11,817.42	12,191.02
NORTHERN ONTARIO PROPERTIES				
230,000-volt.....steel tower.....	55.28	55.28	55.28	55.28
230,000-volt.....wood pole.....	144.75	251.80	144.75	251.80
115,000-volt.....steel tower.....	865.64	885.50	1,519.08	1,522.78
115,000-volt.....wood pole.....	1,301.65	1,460.19	1,301.65	1,460.19
69,000-volt.....wood pole.....	203.72	203.72	203.72	203.72
44,000-volt and less. wood and steel...	1,603.51	1,748.32	1,674.98	1,814.16
Total Northern Ontario Properties	4,174.55	4,604.81	4,899.46	5,307.93
Total—All systems.....	14,000.25	14,689.24	16,716.88	17,498.95

Junction was undertaken using a recently perfected optical distance-measuring instrument known as a reduction tacheometer. Ground measurement with standard distance-measuring devices was not required, and use of the instrument gives promise of reducing man-hours on such a job by nearly 40 per cent. A new item of electronic equipment, the tellurometer, using a microwave system of distance measurement was used experimentally with satisfactory results on an investigation survey on the Mississagi River.

## Regional Office and Service Buildings

A new East Central Region office building in Belleville was officially opened in May. Plans are now being developed for a new regional office building in the Toronto area. Construction of ten new area office buildings, nine new area service buildings, and one combined office and service building was completed during the year.

In anticipation of growing interest in electric heating the Commission will install it in two of the area buildings at present under construction with a view to obtaining accurate operating information. The performance of the heat-pump installation for heating and air-conditioning the Robert H. Saunders-St. Lawrence Generating Station has been good.

## Hydraulic Models

The Commission's Hydraulic Model Laboratory continues to be a centre of interest to visitors from all over the world. A coloured moving picture

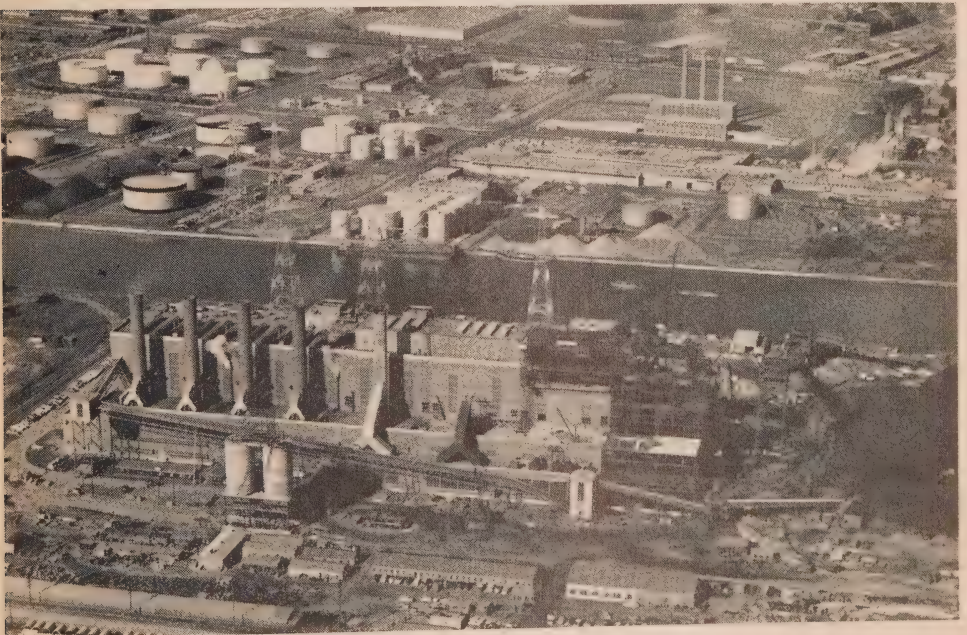


of the type of work carried out there is being prepared for publication in 1959. During 1958, demonstrations were given of future navigating conditions at the approaches to the new Iroquois Lock for the benefit of ship owners and captains. Contractors bidding on the United States part of the tailrace improvement at the St. Lawrence Power Project were given, through the use of these models, some indication of the conditions they could expect to encounter. Studies are being continued in the program of work undertaken on behalf of the Power Authority of the State of New York with respect to the Lewiston Power Project.

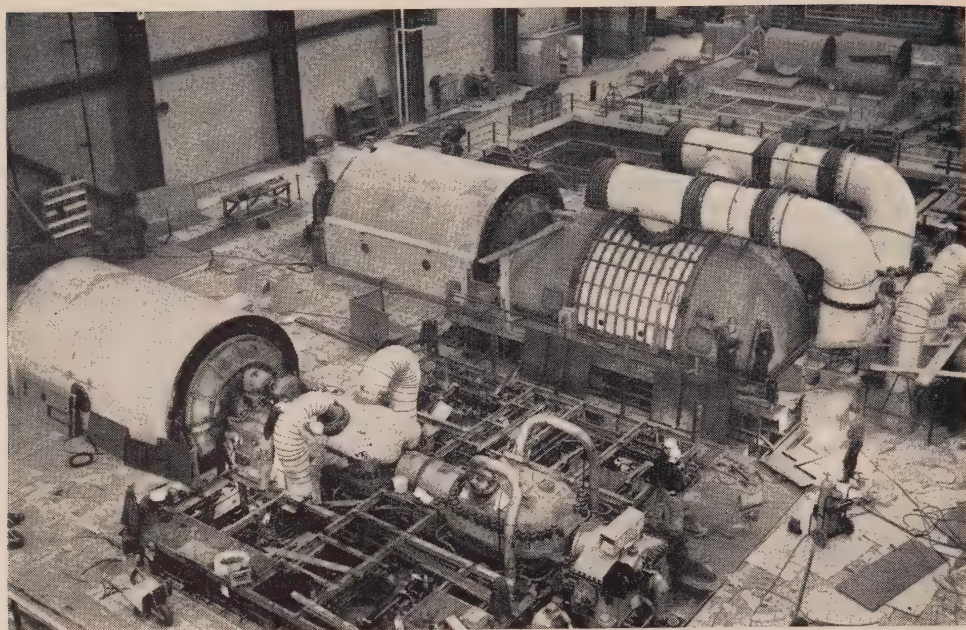
## **SOUTHERN ONTARIO SYSTEM**

### **Progress on Power Developments**

The development of generating facilities in the Southern Ontario System involved four major projects—the completion of the redevelopment program on the Niagara River, continuing work on the St. Lawrence Power Project including the partial completion of Robert H. Saunders-St. Lawrence Generating Station where seven units were placed in service, a program for the extension of Richard L. Hearn Generating Station in Toronto by four additional units, and initial construction at Lakeview Generating Station just west of Toronto. The first was the subject of a special descriptive article in the 1957 Report in recognition of the initial operation of the pumping-generating station associated with Sir Adam Beck-Niagara



**RICHARD L. HEARN GENERATING STATION**—The addition of four turbo-generators will bring the installed capacity of the station to 1,200,000 kilowatts. During 1958, the installation of the first of these units neared completion. It will be placed in service early in 1959.



RICHARD L. HEARN GENERATING STATION — Work crews assemble the first of four 200,000-kilowatt steam turbo-generators to be installed at the station. The cross-compound turbines are arranged in a double line to obtain maximum efficiency.

Generating Station No. 2 and the dedication of the completed remedial works in the Niagara River. The Robert H. Saunders-St. Lawrence Generating Station is similarly treated in this year's Report. The growing importance of thermal-electric generation is indicated by the magnitude of the two projects at present being developed in the Toronto area where 1,400,000 kilowatts, or 32 per cent of the present system generating capacity, will be added during the period 1959 to 1962.

#### SIR ADAM BECK-NIAGARA GENERATING STATION NO. 2 AND THE ASSOCIATED PUMPING-GENERATING STATION—NIAGARA RIVER.

- |                             |  |
|-----------------------------|--|
| <i>Location</i>             | —Near Queenston, 6 miles down stream from the cataract and adjacent to Sir Adam Beck-Niagara Generating Station No. 1.                                     |
| <i>Installed Capacity</i>   | —1,370,000 kilowatts, 60 cycles (1,200,000 kilowatts in 16 units in the main generating station, and 170,000 kilowatts in the pumping-generating station). |
| <i>Rated Head</i>           | —Main generating station—292 feet.<br>Pumping-generating station turbines—80 feet.   |
| <i>In Service</i>           | —Seven main generating units in 1954, five in 1955, two in 1957, and two in 1958. Three pumping-generating units in 1957 and three in 1958.                |
| <i>Cost at December 31,</i> | —\$312,200,000 including generation, step-up trans-<br>1958, (16 units and formation, and high-voltage switching at the site.<br><i>pumped storage</i> )   |

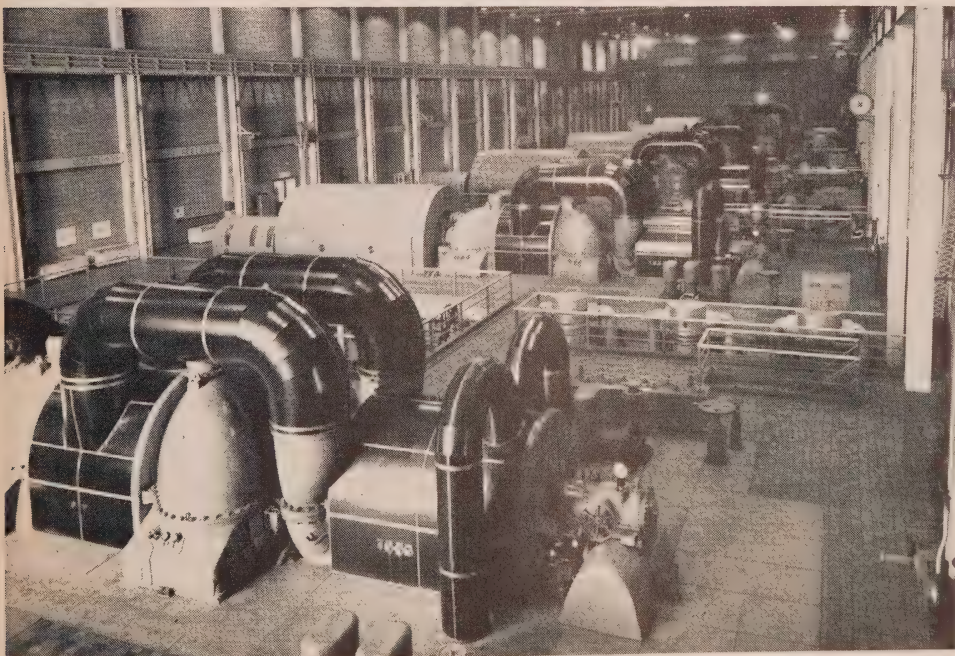


Following the completion of structural and electrical work, the last two of the sixteen units in the main powerhouse were placed in operation on June 26 and August 14. Units 4, 5, and 6 were placed in service at the pumping-generating station on March 3, April 14, and June 9.

#### RICHARD L. HEARN GENERATING STATION—TORONTO.

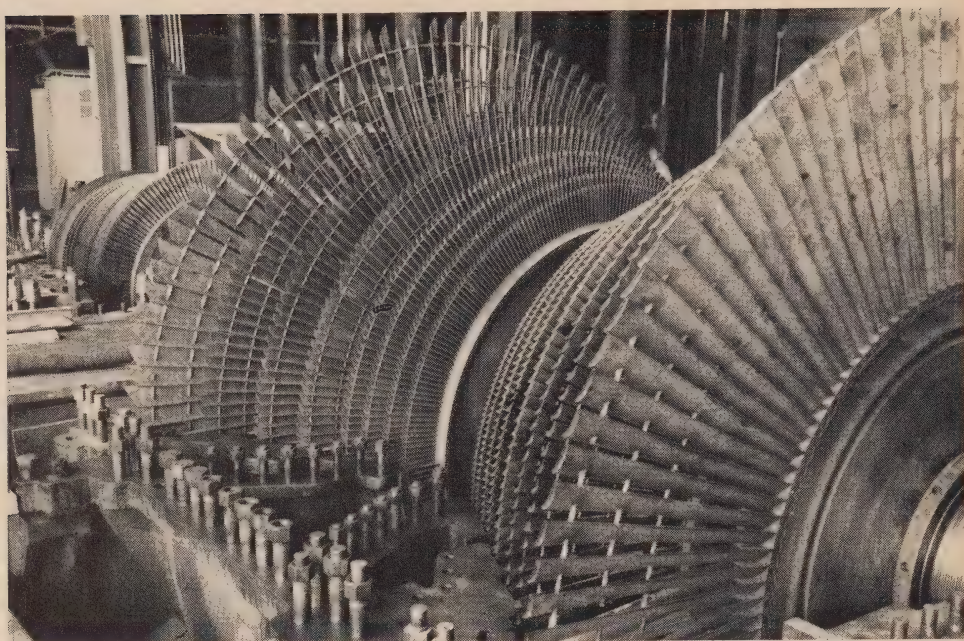
<i>Location</i>	—Eastern area of the Toronto waterfront.
<i>Installed Capacity</i>	—1,200,000 kilowatts, 60 cycles (400,000 kilowatts in 4 units, and 800,000 kilowatts in 4 units).
<i>In Service</i>	—Unit No. 1, 1951; Units No. 2 and 3, 1952; Unit No. 4, 1953.
<i>In-Service Schedule</i>	—Units No. 5 and 6 in 1959, and Units No. 7 and 8 in 1960.
<i>Estimated Cost</i> (4 additional units only)	—\$107,640,000, including generation, step-up transformation, and high-voltage switching at the site.

Work is proceeding for the extension of Richard L. Hearn Generating Station by the installation of four 200,000-kilowatt turbo-generator sets, making eight units in all. Delay in equipment and materials deliveries required the postponement of the in-service date for the first of the new units from October 1958 to February 1959.



RICHARD L. HEARN GENERATING STATION — This view of the generator floor from the visitors' gallery shows four steam turbo-generators in service. In the background the installation of the first of four additional turbo-generators is in progress. A temporary end-wall closes off the station.





RICHARD L. HEARN GENERATING STATION — Reaction blades individually machined bristle from the duplex low-pressure cylinder of No. 5 unit.

Structural steel for the entire extension was almost complete and the walls and the roof were nearly finished as far as the Unit No. 7 stage. Work on the coal-handling system was well advanced.

For Unit No. 5 the turbine, generator, and boiler installation was approaching completion at the end of the year. Test pressure in the boiler had been raised to 3,300 psi for inspection. For Unit No. 6, deaerators, demineralizers, pulverizers, and pre-heaters were finished; the precipitators and the induced-draft fans and ducts were over 90 per cent complete. Work was progressing on Unit No. 7 on a schedule involving an in-service date of October 1960, and work was well begun for Unit No. 8.

#### LAKEVIEW GENERATING STATION—NEAR TORONTO

<i>Location</i>	—On Lake Ontario just west of Toronto.
<i>Installed Capacity</i>	—600,000 kilowatts in 2 units, 60 cycles.
<i>In-Service Schedule</i>	—Unit No. 1 in 1961 and Unit No. 2 in 1962.
<i>Estimated Cost</i>	—\$98,000,000, including generation, step-up transformation, and high-voltage switching at the site.

Negotiations for the purchase of land for the site are now complete and earth excavation for the powerhouse has begun. Work to provide services to the area was under way, including preparatory excavation work for the main service road. The initial shoreline protection work and cofferdam were built.

A number of major items of equipment have been purchased—turbine generators, steam generators, boiler feed pumps, steam surface condensers and auxiliaries, deaerators, high- and low-pressure feed heaters, dust collectors, the turbine-room cranes, and the main transformers.

Acquisition of the necessary transmission line rights of way was well advanced.

#### Potential Thermal-Electric Station Sites

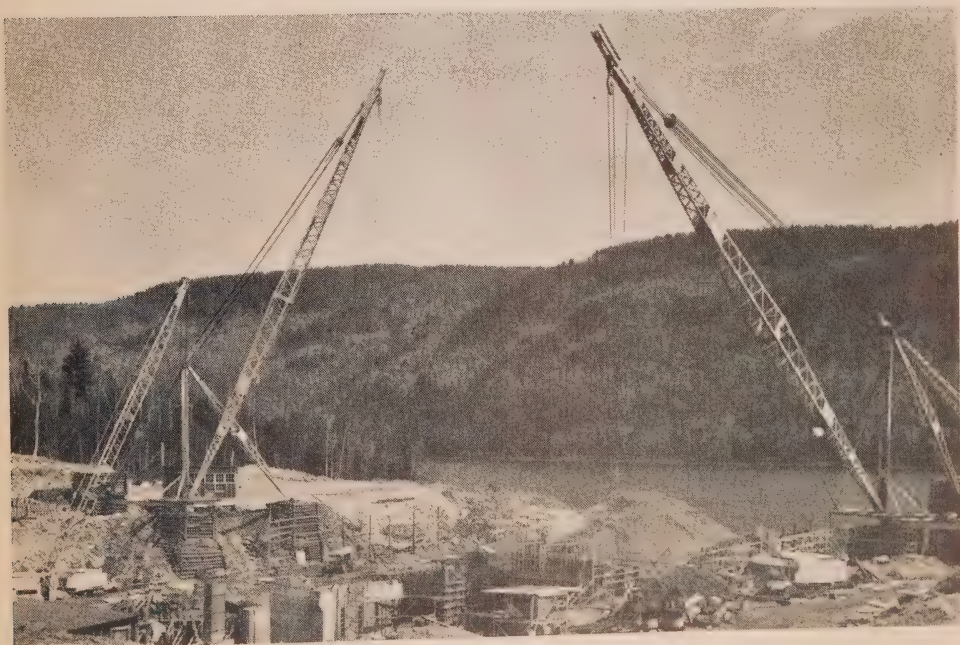
Geological investigations and ground and water surveys were carried out during the year in connection with two other sites for large thermal-electric installations.

#### Nuclear-Electric Resources

Construction of the 20,000-kilowatt Nuclear Power Demonstration Project was resumed in August after a lapse of 16 months, during which time the design of an improved reactor was incorporated in the plant specifications. Work is now proceeding simultaneously on the pump-house and the powerhouse.

Engineering work for the conventional part of the project was resumed in February 1958 and all major equipment for the station had been purchased by the end of the year.

The work for this project is being carried out in conjunction with Atomic Energy of Canada Limited and the Canadian General Electric Company Limited.



**NUCLEAR POWER DEMONSTRATION** — In a picturesque setting among the hills of the Ottawa River, construction is under way for the first nuclear power generating station in Canada. The 20,000-kw station is being built close to the Commission's Des Joachims Generating Station.



Early in 1958 a Nuclear Power Division of Atomic Energy of Canada Limited was established at the A. W. Manby Service Centre in Metropolitan Toronto and several of the Commission's engineers were assigned to work with the Division. They will participate, together with engineers from other interested agencies, in a program for the development of a design for a full-scale nuclear power station.

#### ROBERT H. SAUNDERS-ST. LAWRENCE GENERATING STATION

<i>Location</i>	—The International Rapids Section of the St. Lawrence River about 2 miles west of Cornwall.
<i>Installed Capacity</i>	—940,000 kilowatts in 16 units, 60 cycles (Ontario Hydro's share).
<i>Rated Head</i>	—81 feet.
<i>In Service</i>	—7 units in 1958 on July 5, July 8, July 12, August 22, September 12, October 8 and November 12.
<i>In-Service Schedule</i>	—9 units in 1959.
<i>Estimated Cost</i>	—\$300,000,000, including generation, step-up transformation, and associated high-voltage switching at St. Lawrence Transformer Station.

The Robert H. Saunders-St. Lawrence Generating Station is the Canadian half of the 3,300-foot powerhouse structure which is the central feature of the St. Lawrence Power Project. This structure, bisected by the International Boundary, spans the north channel of the St. Lawrence River between the eastern tip of Barnhart Island and the Canadian mainland. The area affected by the project as a whole lies along a 40-mile stretch of the river which there forms the international boundary between the Province of Ontario and the State of New York. This affected area extends southwest from Cornwall to a point about 5 miles up stream from Cardinal. The normal engineering difficulties attending construction of a project of this magnitude were only a phase of a complex involving problems in jurisdiction, administration, and public relations. Certain problems were typical of those associated with projects to raise levels of international waters; others resulted from the necessity to co-ordinate the power development with the St. Lawrence Seaway Development; still others involved the relocation of established communities and facilities in order to provide for the area of the headpond.

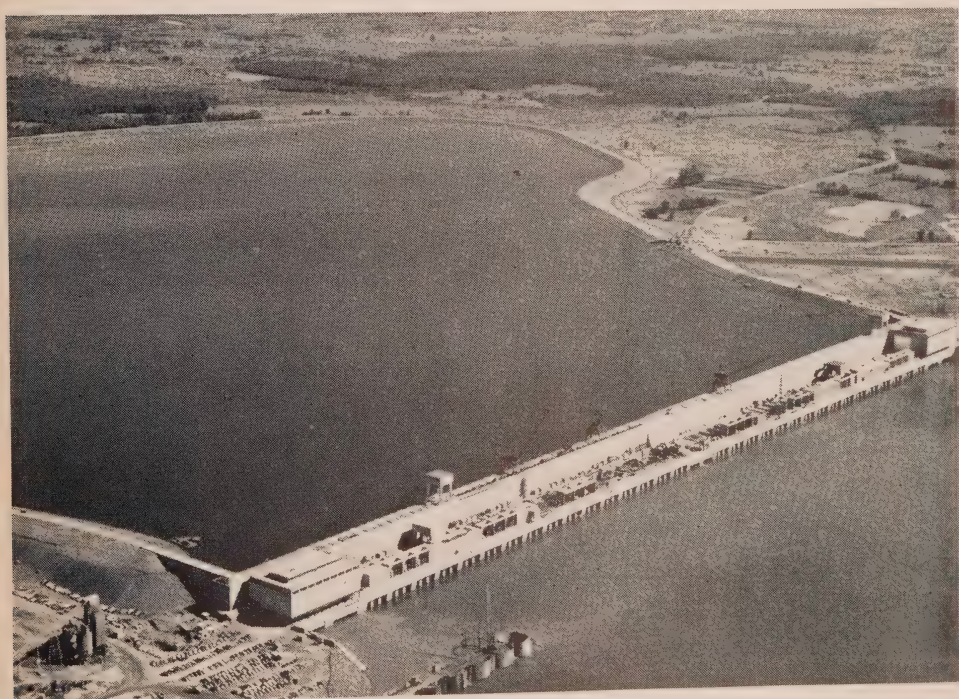
#### History

The Commission's interest in developing power from the St. Lawrence River dates back to 1913 when special investigations were first undertaken. Field surveys and studies extending over several years prepared the way for a formal submission with respect to the power possibilities of the International Rapids Section. This was made in 1921 to the International Joint Commission, which had been established under the Boundary Waters Treaty of 1909 to deal with problems related to the use of international



waters. This first formal statement was favourably received by the International Commission and a Joint Board of Engineers was named to study how the power could best be developed. Following upon a report by the Joint Board, representatives of Canada and the United States, in 1932, signed the St. Lawrence Deep Waterway Treaty which called for the construction, as an international undertaking, of a combined seaway and power project in the International Rapids Section of the river. The treaty was, however, not ratified by the United States. The linking of the power and navigation aspects of the scheme, though economically and physically appropriate and practicable, proved to be only the beginning of a series of discussions, proposals, and counter proposals over a period of more than twenty years. Renewed negotiations brought about the Great Lakes-St. Lawrence Basin Agreement of 1941, which was neither approved nor rejected by the United States Congress. After more than 11 years of uncertainty, Canada, having advanced an alternative plan for development, finally ended the agreement on November 4, 1952. Opponents of the Seaway in their determination to block the one development, had effectively forestalled the other, since the two were inextricably bound together in both the 1932 treaty and the 1941 agreement.

In 1951 Canada proposed that separate agencies be authorized to construct the power works on the understanding that Canada would



**ST. LAWRENCE POWER PROJECT**—On July 1, 1958 the 600-foot cofferdam up stream from Robert H. Saunders-St. Lawrence Generating Station was breached. Water flowed in to form the 100-square-mile Lake St. Lawrence. In this aerial view the broad sweep of the new lake is defined by the dike on the Canadian shore.



complete the 27-foot navigation scheme from Montreal to Lake Ontario as a Canadian venture. In December 1951 the Government of Canada concluded an agreement with the Province of Ontario, subsequently approved by an enactment of the Provincial Legislature on April 10, 1952, delegating the power aspects of the operation to the Province, which in turn delegated its responsibilities to The Hydro-Electric Power Commission of Ontario. The Governments of Canada and the United States, on June 30, 1952 on the basis of an exchange of notes at that date, each made a submission to the International Joint Commission which issued an Order of Approval for the power project on October 29, 1952.

On July 15, 1953 the United States Federal Power Commission issued a licence to the Power Authority of the State of New York to develop the United States share of the power. The granting of this licence, already opposed on earlier occasions, was challenged in the United States courts. The Authority was thus not free to proceed until June 7, 1954 when the United States Supreme Court announced that it would not entertain a final appeal against earlier judgments in the Authority's favour. The same Supreme Court decision opened the way for construction of the navigation works. A United States proposal, based on legislation passed in May 1954 involving the creation of a St. Lawrence Seaway Development Corporation, was discussed at meetings in Ottawa during July and August.



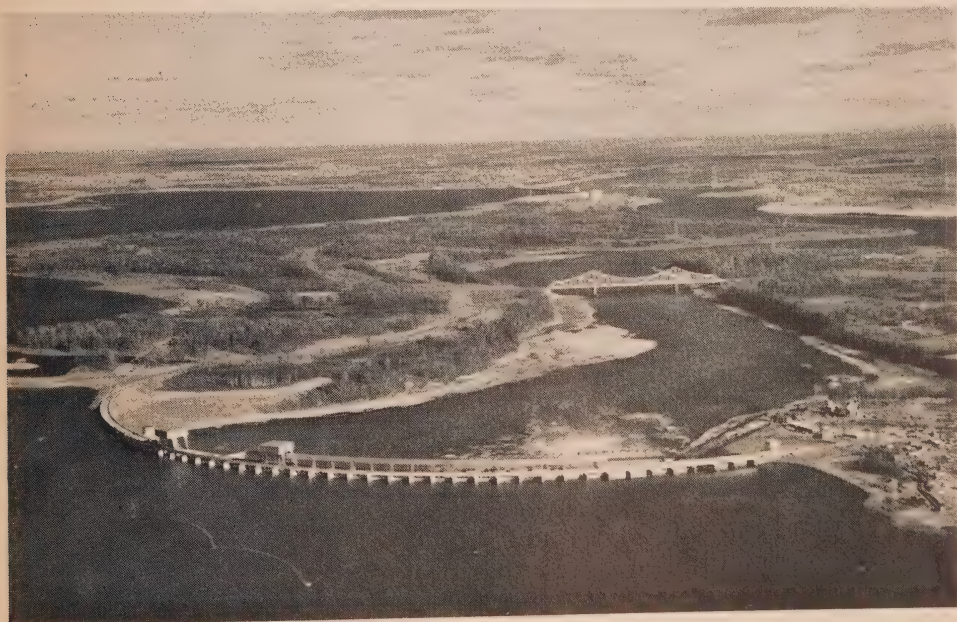
**ST. LAWRENCE POWER PROJECT** — This view looking down stream shows Barnhart Island prior to the commencement of construction in the area. The waters of the St. Lawrence River, divided at this point by Barnhart Island, rushed turbulently into the south channel at the right, over the Long Sault rapids. Now, with a dam spanning the south channel at the western end of the island and the powerhouse spanning the north channel at the eastern end, the rapids have disappeared and an 81-foot head has been created for the generation of electric power.

See the corresponding picture, after construction, on page 71.

On August 10, 1954 a ceremony for the turning of the first sod was held at the powerhouse site and first tenders for work on the power project were called later in the year. The first tenders for the navigation works were called for in September and work was begun before the close of the 1954 construction season. The two aspects are entirely separate undertakings, based on separate authorizations, built by different construction agencies, and separately financed. Joint use of the river, however, has involved the most complete co-ordination and co-operation in the planning and construction stages and will continue to demand the same in the operation of the completed developments.

#### **Drainage Area**

The Great Lakes-St. Lawrence Basin westward from Cornwall covers an area of more than 300,000 square miles, of which almost a third is water. Its northern and western limits on the Canadian side are formed by the rocky Laurentian Shield. The United States shore is generally a terrain of low altitude comprising rolling hills chiefly of glacial origin. The chain of lakes extending westward half-way across the continent constitutes the largest body of fresh water in the world. The St. Lawrence River, which for the first 60 miles from its origin at the eastern tip of Lake Ontario is virtually an arm of the lake, carries the outflow of this vast hinterland northeastward to the sea. Tributary flow to the river between Lake

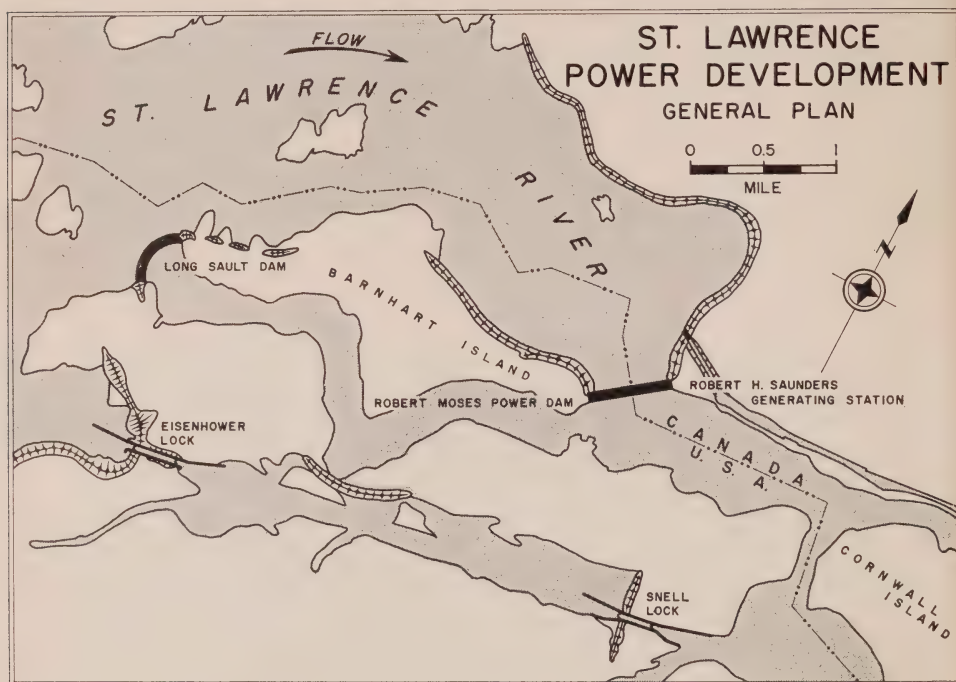


**ST. LAWRENCE POWER PROJECT** — In this general view of the project, looking down stream, the Long Sault dam curves gracefully from the western end of Barnhart Island to the United States mainland. At the middle right is the bridge that provides access to the island from the south shore. In the background the adjoining powerhouses of Ontario Hydro and the Power Authority of the State of New York can be seen spanning the north channel.



Ontario and Cornwall is negligible in comparison with the mean annual discharge from Lake Ontario of 245,800 cfs, and the latter amount is therefore assumed as the flow available for power.

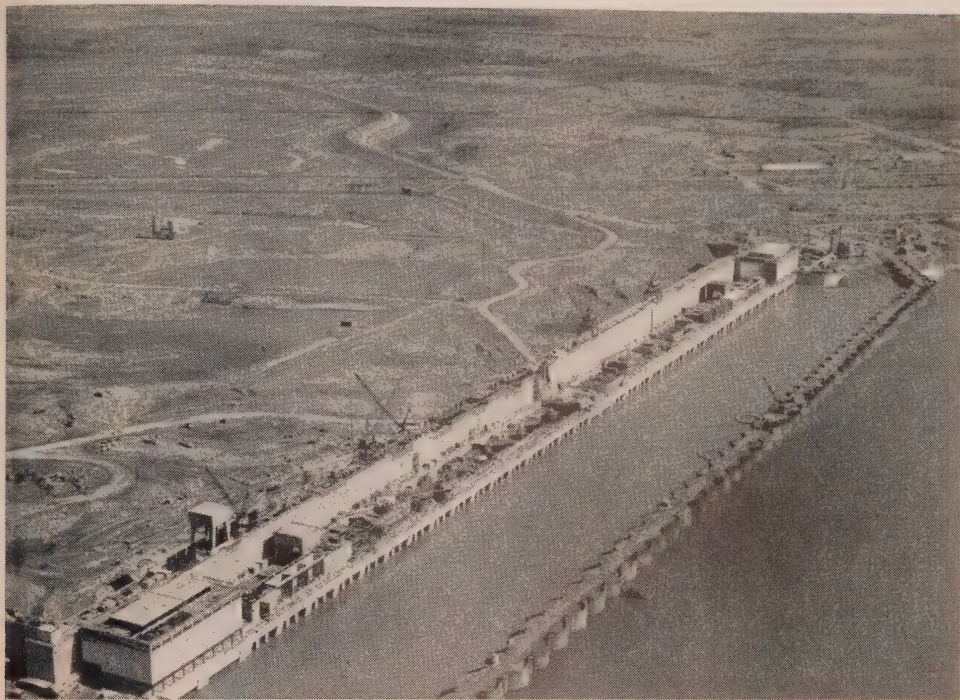
The present proposal is that eventually river-flow be controlled in accordance with a plan of regulation prepared by the International St. Lawrence River Board of Control and approved by The International Joint Commission. This would provide for a range in water-levels in Lake Ontario from elevation 244 to 248 during the navigation season and for a regulated outflow from the lake ranging from a maximum of 310,000 cfs to a minimum varying from 190,000 cfs in the spring and fall to 212,000 cfs in the winter. The plan is designed to control levels in Lake Ontario



and at the same time to protect navigation and other interests down stream. Until the full implementation of the proposal, lake-levels and outflows from Lake Ontario are being maintained as they were prior to construction.

### Main Features

The main structure incorporating the two powerhouses extends 3,300 feet across the north channel of the river from the eastern tip of Barnhart Island to the Canadian shore. It is bisected by the International Boundary. The Canadian half comprises the 16-unit Robert H. Saunders-St. Lawrence Generating Station with integral headworks, one ice sluice adjacent to the United States half, and two ice sluices at the Canadian shore. Dikes to contain the headpond on the Canadian side and improvements in river channels to meet navigation and power requirements were also included as part of the construction project. Up stream at the western extremity of the island



**ST. LAWRENCE POWER PROJECT** — Early in April water was admitted into the tailrace area of Robert H. Saunders-St. Lawrence Generating Station. This was accomplished by removing fill from the middle cell of the cofferdam and cutting holes in its side.

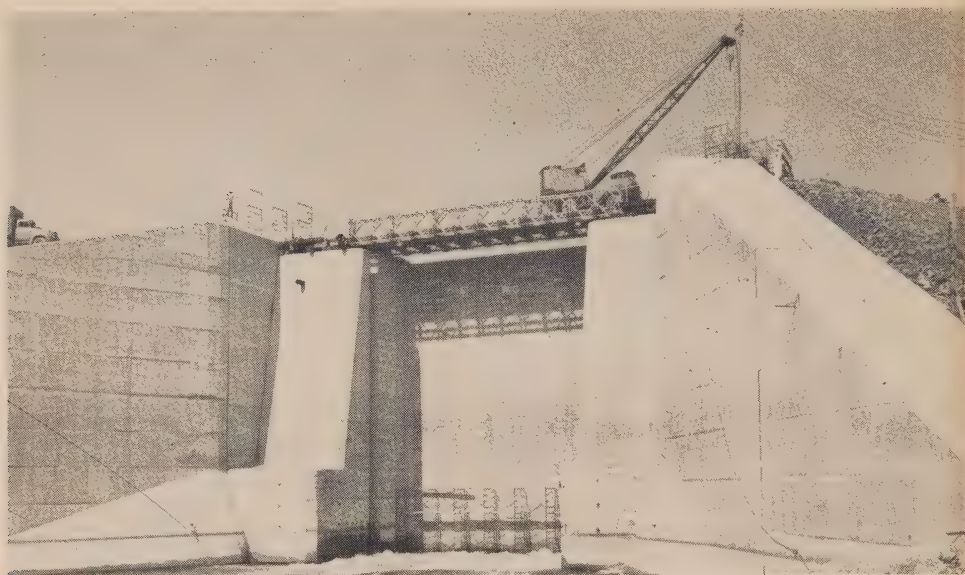
the 2,960-foot Long Sault dam spans the south channel of the river, and about 25 miles farther up stream the Iroquois control dam spans the river between Iroquois Point on the Canadian side and Point Rockway on the United States side.

The cost of all work, exclusive of machinery and equipment in the powerhouses, will be shared equally by the Commission and The Power Authority of the State of New York.

### **Construction**

The flow of water into the powerhouse site was stopped by two cofferdams, one an earth and rockfill structure in a narrows about  $2\frac{1}{2}$  miles up stream, and a much more substantial structure 4,300 feet long and closing the north channel some 500 feet down stream from the site. The latter consisted of sixty circular cells of sheet piling filled with gravel and earth. The area between the dams was then pumped dry, and excavation for the powerhouse began. Ships continued to use the Cornwall navigation canal which paralleled this area to the north. Access to the construction area was provided by two tunnels under the navigation canal and a retractable Bailey bridge at Lock 19 about three-quarters of a mile down stream from the powerhouse site.





ST. LAWRENCE POWER PROJECT — During construction of the powerhouse, ships passed up and down the river through a 50-foot opening in this concrete structure. Built into the dike on the Canadian shore, the structure was closed on July 1 to seal the headpond area.

Subsequently as the dikes extending north and west from the powerhouse were built up, this channel had to be closed. A temporary diversion canal was established to the north, and passage for shipping through the dike was provided at a concrete structure which was eventually to be the point of closure for the dike. Closure was made on June 30, 1958 by placing steel stoplogs in this structure. As a safety measure a reinforced-concrete wall 7 feet thick was built on the downstream side at the point of closure and keyed into the previous concrete structure. Removal of the downstream cofferdams had already begun on March 30. On July 1, well under four years after the commencement of construction, the upstream cofferdam was removed and filling of the headpond area began. The first unit was placed in service on July 5 and by the end of the year seven units were in service.

Superstructures were erected for those parts of the powerhouse which will house the erection bay, the control room, and the administration offices. Gates were installed in all three ice sluices in readiness for winter operation. Excavation and dredging to the required depth and width were completed in the 27-foot navigation channel up stream from the powerhouse, but excavation in areas beyond the navigation channel will continue for some time.

### **Long Sault Dam**

The Long Sault dam was designed and built by the Power Authority of the State of New York. The Commission took the major part in planning and carrying out a scheme for diverting the river to facilitate construction.





ST. LAWRENCE POWER PROJECT — Earth and debris roar skywards in the early morning of July 1 as 30 tons of explosive demolish the 600-foot cofferdam located 2 ½ miles up stream from the Robert H. Saunders-St. Lawrence Generating Station.



ST. LAWRENCE POWER PROJECT — Water rushed through two 100-foot gaps torn in the upstream cofferdam by the explosive charges, and the flooding of the headpond began. Three days later the powerhouse forebay was flooded to a depth of 90 feet.

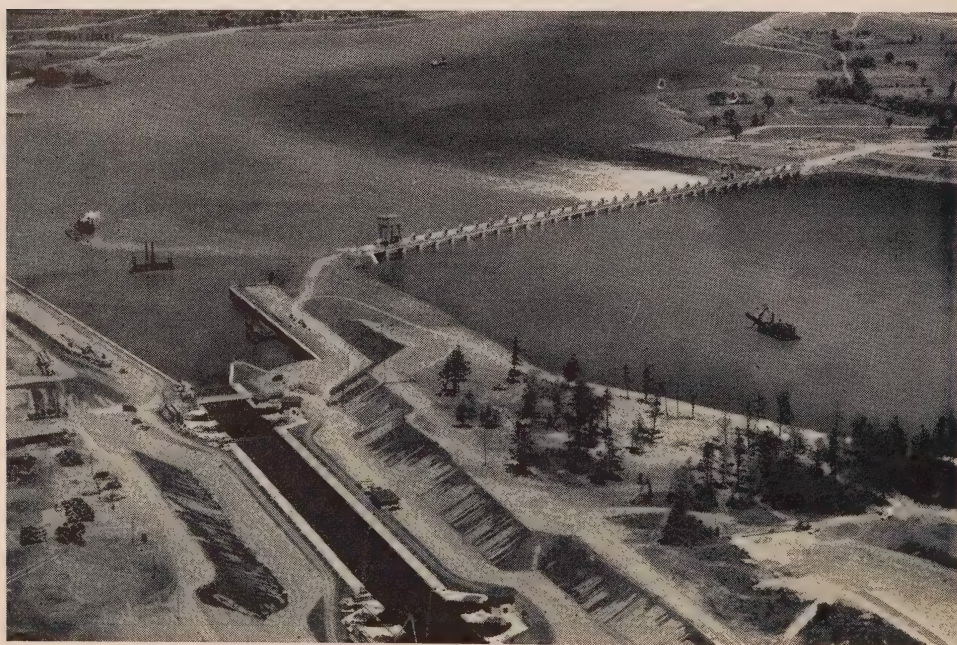
Model tests on which the scheme was based were carried out at the A. W. Manby Service Centre.

The 2,960-foot curved-axis concrete structure comprises thirty 50-foot sluiceways formed by 10-foot piers. It terminates at each end in a bulkhead with wing walls. Eighteen sluiceways are equipped with fixed electric hoists, the remaining twelve are handled by cranes on the service deck. They will discharge flows in excess of plant requirements and effect major control of headpond levels within specified ranges. The maximum height of the dam from foundation to deck is 145 feet. Construction required the excavation of over six million cubic yards of earth and rock and the placing of some 650,000 cubic yards of concrete.

### **Iroquois Dam**

The studies which established the most appropriate location and the general construction of this dam, and in addition some preliminary design for the structure, were carried out by the Commission. The Power Authority completed the design and carried out construction.

The dam, with a concrete section of 1,980 feet exclusive of wing walls, controls outflow from Lake Ontario. Its thirty-two 50-foot sluices are designed to carry a maximum flow well in excess of the greatest recorded on the river. Two 350-ton travelling gantry-cranes operate the steel roller-type sluiceways. The gates can be dogged in open position.



ST. LAWRENCE POWER PROJECT — Flow from Lake Ontario is regulated by a control dam at Iroquois about 35 miles up stream from Robert H. Saunders-St. Lawrence Generating Station. The 2,250-ft. dam is by-passed by a canal and lock system.



### Channel Enlargement

The combined seaway and power development required that in the International Rapids Section of the river provision be made for a channel conforming with specifications for 27-foot navigation. Further adjustments were required in the river, first to reduce water velocities in order to facilitate the formation of an ice cover when required, and second to reduce losses at points of restriction in the river so as to provide the maximum head at the powerhouse.

The Commission at its Hydraulic Model Laboratory prepared the designs for all channel improvements in conformity with the terms of the International Joint Commission's Order of Approval. Channel enlargement was carried out in six separate areas by contractors engaged by the Commission, at Chimney and Galop Islands, at Iroquois Point and Point Three Points, and in the vicinity of Cardinal and Morrisburg. When this work is finished in 1960, dredging of the tailrace channel will begin.

### Rehabilitation Work

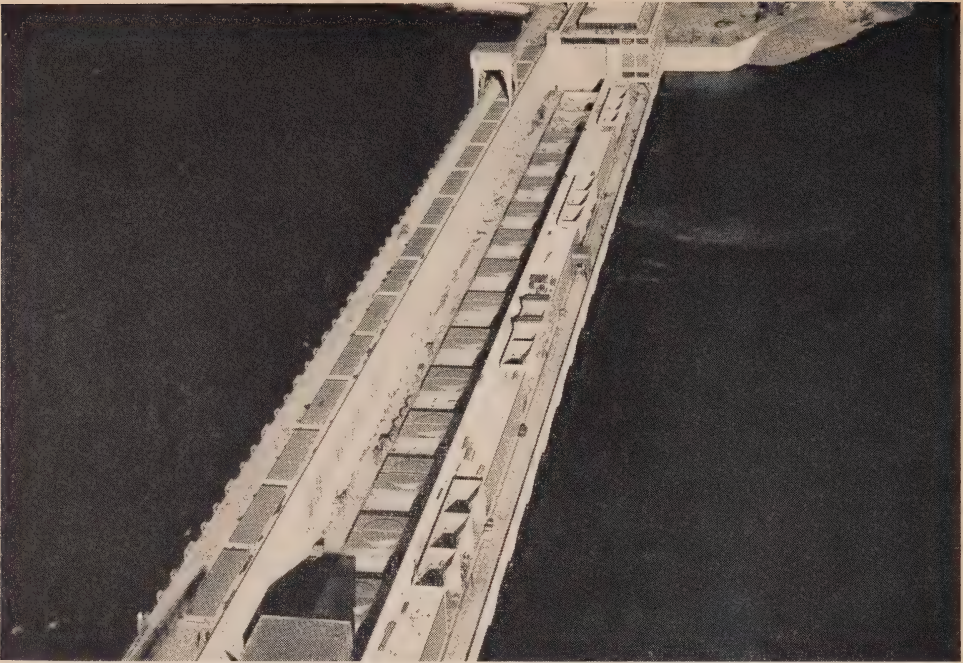
The inconvenience attending the evacuation of some 6,500 persons from the headpond area on the Canadian side of the river was reduced to a minimum by detailed planning and the continuous consideration given the residents of the area affected. In all, 525 homes were moved to alternative



ST. LAWRENCE POWER PROJECT — Floe ice in the headpond of Robert H. Saunders-St. Lawrence Generating Station will be discharged with a minimum loss of water through three ice sluices equipped with drum gates.

Two of the sluices, each with 75-foot-wide gates, are visible in this view of the headworks.





**ST. LAWRENCE POWER PROJECT** — Sixteen centre-parting roll-back hatch covers mark the location of the generating units at Robert H. Saunders-St. Lawrence Generating Station. Transformer pockets, each housing a bank of 3 single-phase 86,000-kva transformers, extend along the downstream side. On the upstream side the headworks gantry crane stands astride the headgate hoist covers near the administration building.

sites, and 96 multiple-dwelling units were constructed. Entirely new settlements were built at Iroquois, Long Sault, and Ingleside; one-third of residential Morrisburg was relocated and the entire business section of the town was re-established to the north in a new shopping centre. The associated new facilities have included fourteen churches, nine schools, five railway stations, and four shopping centres. A 35-mile section of Highway No. 2 and 40 miles of the Canadian National Railways double-track main line were also relocated. By the end of 1958 all work was complete except for a lodge hall and one church, which are still under construction, and certain miscellaneous items of landscaping.

#### **Headworks**

The headworks and the powerhouse are an integral part of the structure closing the north channel. Each of the sixteen intake passages is divided by intermediate piers into three bays. Initial control of flow to the turbines is effected by headgates located in these bays, each gate being separately operated by a fixed electric hoist. Service for the headworks is provided by a 90-ton gantry-type electrically operated crane moving on tracks extending the length of the dam.

#### **Ice Sluices**

Floe ice can be discharged past the powerhouse through the three ice sluices. Two passing through the concrete substructure of the erection

bay adjoining the shore are 75 feet wide and the third, which is adjacent to the Power Authority's generating station, is 50 feet wide. Each sluice will be equipped with a drum gate, sectoral in cross-section and hinged at the centre of radius of the sector near the upstream entrance to the sluice. Each gate will swing downwards into a floatation chamber in the concrete substructure so that, in the open position, the upper exposed side of the gate will become the crest of the spillway. When the chamber is completely flooded the gate will float into an upright position and be fully closed. A 30-inch inlet conveys water from the forebay into each floatation chamber; drains equipped with butterfly valves are capable of discharging a chamber in 60 seconds.

### **Powerhouse and Adjoining Structures**

There is no conventional superstructure above the generating units, which are protected by sliding covers. Hoisting service for the units is provided by 300-ton gantry-type electric cranes, one for each of the powerhouses. Both cranes are fully enclosed and move on tracks running the full length of the powerhouse structure so that they become, in effect, movable superstructures available for service wherever they may be required on either of the powerhouses.

The superstructure housing the erection bay, the machine shop, administration offices, and other facilities rises 76 feet above the powerhouse deck



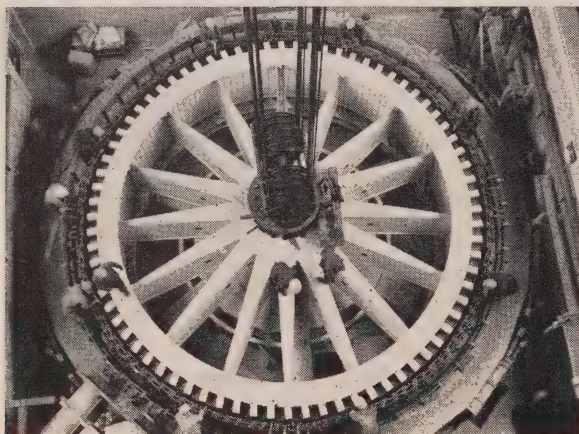
**ST. LAWRENCE POWER PROJECT** — An electrically operated travelling gantry-crane capable of lifting 300 tons stands astride the hatch covers which, in the absence of the conventional superstructure, protect the generating units at Robert H. Saunders-St. Lawrence Generating Station. By means of the crane, units can be removed to the erection bay visible in the background. Net weight of the crane is approximately 625 tons.



level and is located above the two ice sluice openings near the Canadian shore. In this area, hoisting service is provided by two 80-ton, electric, overhead, travelling cranes, but a rising door will permit the 300-ton gantry-crane to enter the area, thus facilitating the transfer of loads from one crane to the other.

### Generating Station Equipment

The sixteen fixed-blade propeller-type hydraulic turbines were supplied by English Electric Company of Canada Limited. They have rated capacities



ROBERT H. SAUNDERS-ST. LAWRENCE GENERATING STATION — The 250-ton rotor for one of the 16 generating units is lowered carefully into position within its stator.

of 75,000 brake horsepower operating at 94.7 rpm under a head of 81 feet. Each is directly connected to a 60-cycle, totally enclosed, water-cooled, electric generator rated at 60,000 kva at .095 power factor. Eight of the generators were manufactured by Canadian General Electric Company Limited and eight by Canadian Westinghouse Company Limited. Governing equipment for the turbines includes a twin-unit actuator and pressure tank for each

pair of units. The generating units, arranged in groups of four, as well as the auxiliary equipment, can be controlled either from the operating floor or from the control room in the administration building.

### Power into the System

Each group of four generators is connected through metal-clad switch-gear to a bank of three single-phase power transformers rated at 86,000 kva which step up the voltage from 13.8 to 230 kilovolts. Each breaker has an interrupting capacity of 2,000,000 kva. Four 230-kv underground cable circuits, the first of this voltage installed under ground by the Commission, carry the current to a line terminal structure about 500 feet from the powerhouse. Four 230-kv transmission lines connect the terminal structure with the St. Lawrence Transformer Station located about 2.5 miles from the powerhouse.

### Transformer Stations

Gross expenditures on transformation in the Southern Ontario System during the year amounted to \$15.6 million, about 11 per cent of the total spent in 1958 on capital construction. The extensive program of work provided for increases in capacity at 14 major transformer stations and the construction of 5 new stations. The greatest activity was centred in eastern Ontario and in the areas of Metropolitan Toronto and Hamilton. In the



southwestern section of the Province, increased load demands, chiefly from large industrial power users, required the development of plans to expand transformation facilities there in the near future.

#### **Stations in the Western, West Central and Niagara Regions**

In anticipation of heavy demands for power by industrial users and municipalities in the Western Region, preliminary work was begun for the expansion of transformation facilities by the addition of 66,666 kva at London-Nelson Transformer Station and of 100,000 kva at London-Highbury Transformer Station. For the Sarnia area, work was begun on the design of Lambton Transformer Station with a capacity of 430,000 kva. Two transformers were added at Sarnia Transformer Station during the year to increase its capacity to 174,500 kva. A fourth 115,000-kva autotransformer was installed at E. V. Buchanan Transformer Station.

Five of the main transformer stations supplying power to the city of Hamilton were modified and expanded during 1958. As part of the work to complete the frequency standardization of Burlington Transformer Station and to provide additional transformation facilities there, a 25-cycle synchronous condenser was being rebuilt to a capacity of 48,000 kva at 60 cycles and all of the 230-kva oil circuit-breakers were being replaced by air-blast circuit-breakers, each with a rupturing capacity of 20 million kva. One of three 75,000-kva, 25-cycle transformer banks at the station was removed in the fall as part of the plan to replace the three banks by a 215,000-kva, 60-cycle autotransformer next year. This transformer together with two 215,000-kva autotransformers previously installed will provide capacity sufficient to meet loads in the Hamilton area until 1965. The capacities of Hamilton-Newton and Hamilton-Gage Transformer Stations were increased during the year, and at Hamilton-Stirton Transformer Station six single-phase transformers were rebuilt to bring the total station capacity to 135,000 kva.

Increases in transformation facilities in the Niagara Region during 1958 included the installation of a new 33,333-kva transformer at Niagara-Murray Transformer Station, replacing a 25,000-kva transformer previously in use there. Engineering and design were in progress also for a new 33,333-kva station which will be built on a site immediately north of Niagara Falls. When completed, this station will provide for increased loads and for additional service security to the municipal electrical utility. Construction is expected to begin early next year.

#### **Stations in the Toronto Area**

The standardization and expansion of 230-kv transformation facilities at Leaside Transformer Station and A. W. Manby Transformer Station in Metropolitan Toronto reached the final stages by the end of 1958. At Leaside Transformer Station the greater part of the 25-cycle facilities had been removed and a third 215,000-kva autotransformer had been installed to bring the total capacity of 60-cycle, 230—115-kv transformation there to 645,000

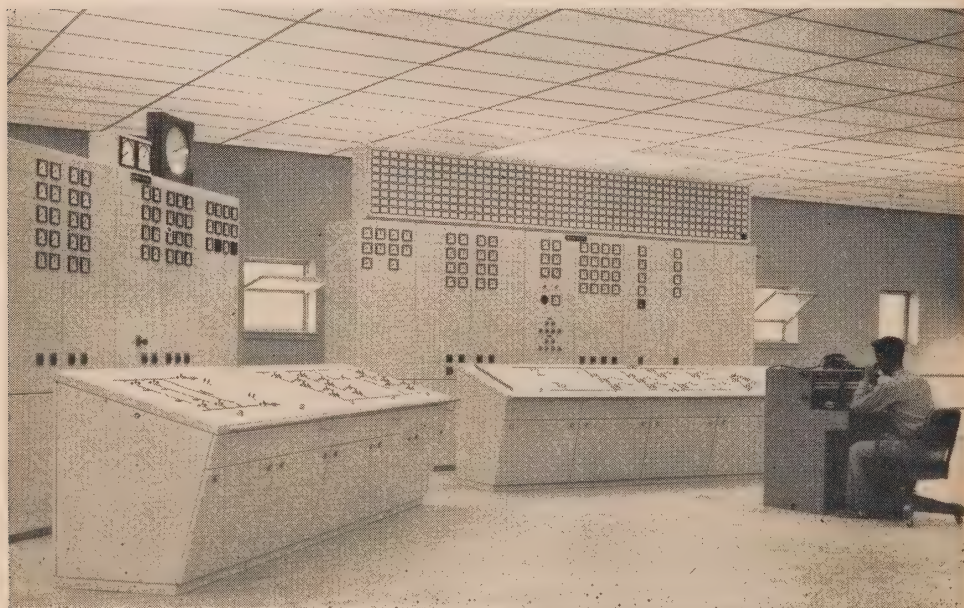
kva. At A. W. Manby Transformer Station a 75,000-kva, 25-cycle transformer bank was replaced by a 215,000-kva, 60-cycle autotransformer. One of the five 115,000-kva, 60-cycle autotransformers was replaced also by a 215,000-kva autotransformer early in January. Next year the four remaining 115,000-kva autotransformers will be replaced by two 215,000-kva units. Supervisory control equipment was also installed there during 1958 for the remote control of John and Esplanade Transformer Stations. In northwest Metropolitan Toronto the construction of a building to house a system control centre at Richview Transformer Station was completed and the transfer of controls to the new centre was begun.

The establishment of Cherrywood Switching Station as the main switching point for all 230-kv transmission lines carrying power from eastern resources is expected to be completed next year. By the end of 1958 fourteen 230-kv, 60-cycle, air-blast circuit-breakers had been installed as part of the terminal facilities for these circuits.

Transformation facilities at a number of 115-kv stations in the Toronto area were expanded during the year. A new transformer station under construction at Teraulay and Bay Streets in downtown Toronto will have an ultimate capacity of 160,000 kva. It will be supplied by two 115-kv underground cable circuits.

#### Stations in the East Central and Eastern Regions

The placing in service of the Robert H. Saunders-St. Lawrence Generating Station required extensive transformation facilities in the eastern section of the Province. At the end of 1958 considerable progress had been



ST. LAWRENCE POWER PROJECT—In this well-lighted control room at St. Lawrence Transformer Station the operators have before them instruments which permit continuous supervision of the operating equipment.



made in the establishment of St. Lawrence Transformer Station. Seven 230-kv and three 115-kv air-blast circuit-breakers had been installed as part of the equipment required to incorporate the additional output. Three of the seven 230-kv circuit-breakers were placed in service in July when the first two circuits from the Robert H. Saunders-St. Lawrence Generating Station were energized. A fourth was installed in October to terminate the second 230-kv line from St. Lawrence Transformer Station to Richview Transformer Station. A voltage regulating transformer and two additional 230-kv circuit-breakers were placed in service in December as part of the facilities interconnecting the Southern Ontario System with the system of the Power Authority of the State of New York. During the same month the seventh 230-kv circuit-breaker was installed to terminate the third circuit from the Robert H. Saunders-St. Lawrence Generating Station. It was placed in service in January 1959 when the ninth generating unit at the power station came on the line. Three 115-kv air-blast circuit-breakers were placed in service in November. St. Lawrence Transformer Station will be completely established early in 1959 when the thirteenth and fourteenth circuit-breakers are installed.

In addition to the work carried on at St. Lawrence Transformer Station, the Commission has expanded transformation facilities generally throughout eastern Ontario. In 1958 a new switching station was under construction at Hinchinbrooke, about 25 miles north of Kingston. When completed, this station will provide switching for 230-kv circuits carrying



EAST CENTRAL REGIONAL OFFICE — A handsome new building provides 40,000 square feet of floor space for regional offices at Belleville.



power westward to heavily industrialized areas. About 16 miles immediately to the south of Hinchinbrooke Switching Station a 230,000-kva transformer station known as Catarauqui Transformer Station is being built to supply power to the Kingston-Belleville area. Preparatory work was also under way at the site of Hawthorne Transformer Station near Ottawa. Initially this station will provide switching for circuits to St. Lawrence Transformer Station, Cherrywood Switching Station near Toronto, Beauharnois Generating Station in the Province of Quebec, and Chats Falls Generating Station on the upper Ottawa River. At the new Woodroffe Transformer Station in the western section of Ottawa, the first of two 33,333-kva transformers was placed in service in November. Construction of an 83,000-kva transformer station at Minden Switching Station was completed during the summer months. Transformer stations of 83,000-kva capacity were also under construction at Port Hope and Morrisburg to improve voltage levels and service security.

### **Transmission Lines**

The incorporation of power available from eastern resources required an extensive 230-kv transmission line network and associated switching facilities. During 1958 Commission forces built new lines, standardized 25-cycle lines, and installed equipment to provide five 230-kv circuits between eastern power resources and Cherrywood Switching Station. By the end of the year power from the Robert H. Saunders-St. Lawrence Generating Station was supplied over three of the four 230-kv single-circuit lines to St. Lawrence Transformer Station. From this point 230-kv lines were extended westward 102 miles to Hinchinbrooke Switching Station and northward 47 miles to Ottawa-Hawthorne Transformer Station now under construction. From Hinchinbrooke lines were built westward 90 miles to Ross L. Dobbin Transformer Station and southward 16 miles to the site of Catarauqui Transformer Station. Early in the fall a new line to Richview Transformer Station was established from the east through Hinchinbrooke and Bannockburn. The conductor strung on the new sections of this line arrangement was the first of its type installed by the Commission. Both the conductor and the associated double-circuit steel towers, which were designed to Commission specifications, permit a substantial decrease in weight of steel. The standardization of all the 230-kv, 25-cycle lines east of Metropolitan Toronto was completed toward the end of the year when changes to circuit-breakers and relaying facilities were carried out. By that time all generating units at Chats Falls Generating Station and those of the Commission's Quebec suppliers, with one exception, were supplying power at 60 cycles either as a result of frequency standardization or through the operation of frequency-changing equipment.

Although the main area of 230-kv transmission line development was in the east, a number of important extensions and rearrangements were

carried out in the central and western areas of the Province. A second 230-kv circuit was strung from Cherrywood Switching Station to Leaside Junction. Two of the three transmission tie-lines with the Niagara Mohawk Power Corporation in the Niagara area were relocated in order to facilitate construction of the Lewiston power development by the Power Authority of the State of New York. In the west, about half the section of 230-kv line which will provide a second circuit from Charing Cross Junction to J. Clark Keith Generating Station in Windsor had been strung by the end of the year. From the Junction to E. V. Buchanan Transformer Station a section of line previously operated at 115 kv was reinsulated for use at 230 kv. Together these two sections form a new 230-kv line to the Windsor area which will improve operating conditions and provide for future load growth. Engineering was completed for the construction of a new 230-kv, double-circuit, steel-tower line, 63 miles in length, from E. V. Buchanan Transformer Station to Lambton Transformer Station, to be built near Sarnia next year. Plans also call for the construction of a 65-mile, 230-kv, double-circuit, steel-tower line to link E. V. Buchanan Transformer Station to Neale Junction south of Hamilton in order to supply power to the Western Region with greater security. Surveys of the route were completed in 1958.

In Toronto the Commission continued the development of its 115-kv underground network. In addition to the installation of four 115-kv underground cable circuits between Riverside Junction and Toronto-Strachan Transformer Station, a number of new circuits were installed during 1958. Two 115-kv, three-phase, underground cable circuits, each 5,200 feet in length, were installed between Richard L. Hearn Generating Station and Mill Street Junction. The new circuits will be required to incorporate into the system the output of the fifth steam turbine-generator at Richard L. Hearn Generating Station. Two cable circuits were similarly installed between Toronto-Esplanade Transformer Station and Queen's Quay Junction, a distance of some 6,600 feet. This represents the first stage of the installation of two 115-kv underground cable circuits, each with a capacity of 160,000 kva, to link Richard L. Hearn Generating Station with Toronto-Strachan Transformer Station. Work was also well advanced on the installation of two 115-kv underground cable circuits from Queen's Quay Junction to supply Toronto-Teraulay Transformer Station, now under construction. The underground cable between Toronto-Gerrard Transformer Station and Bloor Street Junction was replaced by a low-pressure, oil-filled cable circuit. The cable was installed in a pipe filled with oil maintained at a small positive pressure above atmospheric pressure. A number of changes to 115-kv overhead lines in the Toronto area were carried out also to accommodate frequency standardization and as part of the over-all expansion of transmission facilities.

## NORTHERN ONTARIO PROPERTIES

## Progress on Power Developments

During 1958, nine hydro-electric generating station projects were under construction in the Northern Ontario Properties. Whitedog Falls Generating Station on the Winnipeg River and Caribou Falls on the English River,

both of which were completed and placed in service in 1958, are discussed in special descriptive articles at the end of this section of the Report. Work also progressed satisfactorily on the one-unit station at Silver Falls on the Kaministiquia River. One-unit extensions were completed and placed in service at each of three other stations in the Northwestern Region—Manitou Falls Generating Station on the English River and Cameron Falls and Alexander Generating



SILVER FALLS GENERATING STATION—A mucking machine in the hydraulic tunnel is greased before being moved to the tunnel face. Operated by compressed air, it speeds the removal of loose rock.

Stations on the Nipigon River. The three other projects are in the North-eastern Division—Red Rock Falls Generating Station on the Mississagi River, Otter Rapids Generating Station on the Abitibi River, and Abitibi Canyon Generating Station, also on the Abitibi River, where an additional 60-cycle unit is being installed.

A tenth project under construction was Thunder Bay Generating Station at Fort William, the Commission's third major thermal-electric generating station.

## SILVER FALLS GENERATING STATION—KAMINISTIKWIA RIVER

<i>Location</i>	—30 miles northwest of Fort William.
<i>Dependable Peak Capacity</i>	—45,500 kilowatts in one unit, 60 cycles.
<i>Rated Head</i>	—330 feet.
<i>In-Service Schedule</i>	—September 1959.
<i>Estimated Cost</i>	—\$16,500,000, including generation, step-up transformation, and high-voltage switching at the site.

Driving of the 10,400-foot hydraulic tunnel was completed and the invert was lined with concrete. Pouring of the arch was begun. The concrete intake structure was built and service gates were installed.

Excavation of the powerhouse foundation was finished and about 30 per cent of the powerhouse structure was concreted.



## OTTER RAPIDS GENERATING STATION—ABITIBI RIVER

<i>Location</i>	—60 miles northeast of Kapuskasing and 23 miles down stream from Abitibi Canyon Generating Station.
<i>Dependable Peak Capacity</i>	—131,000 kilowatts in three units, 60 cycles.
<i>Rated Head</i>	—107 feet.
<i>In-Service Schedule</i>	—Two units in 1961 and one unit in 1962.
<i>Estimated Cost</i>	—\$38,400,000, including generation, step-up transformation, and high-voltage switching at the site.

Two series of rapids, known as the upper and lower Otter rapids, occur on the 2-mile stretch of the Abitibi River which is sometimes referred to as Otter Canyon. The construction of the generating station at the downstream end of the lower rapids will permit good use to be made of the high canyon walls. A head of 107 feet will be possible with a headpond area that will require the clearing of less than 200 acres.

Preliminary design for the station was almost complete by the end of the year and plans have been drawn for the basic requirements of the construction work and for the disposition of the buildings involved.

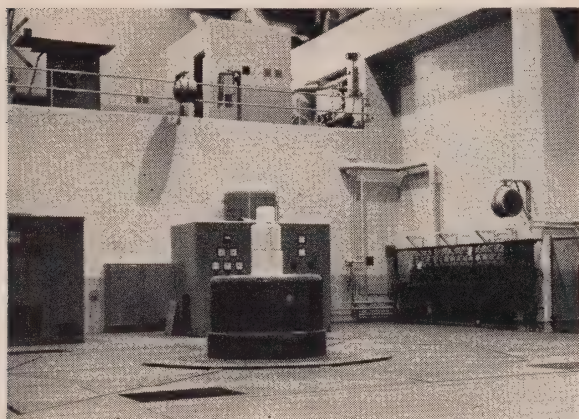
The main dam will span the river at the downstream end of an island which divides the river for some 1,500 feet. Construction of the powerhouse and headworks will proceed in the dry, and will be unaffected by water diversion activity. In the beginning the west channel of the river will be closed by cofferdams, and a bulkhead structure incorporating diversion sluices will be built. Upon completion of this part of the main dam, the river will be diverted through the newly constructed sluices when cofferdams are constructed in the east channel to permit construction of the rest of the main dam, including the control sluices.

The project is served by the Ontario Northland Railway line between Cochrane and Moosonee. During 1958 a road was built from the railway to the generating station site and a camp was established for the construction staff.

## RED ROCK FALLS GENERATING STATION—MISSISSAGI RIVER

<i>Location</i>	—Northeast of Thessalon and 15 miles down stream from George W. Rayner Generating Station.
<i>Dependable Peak Capacity</i>	—38,000 kilowatts in 2 units, 60 cycles.
<i>Rated Head</i>	—93 feet.
<i>In-Service Schedule</i>	—1960-1961.
<i>Estimated Cost</i>	—\$19,100,000, including generation, step-up transformation, and high-voltage switching at the site.

The site of Red Rock Falls Generating Station is about 12 miles in a northeasterly direction from Thessalon. Materials and equipment are brought by freight to a siding 2 miles west of Blind River, from where they are



CAMERON FALLS GENERATING STATION—An interior view of the generating station shows the seventh unit, which was added to the station in 1958.

transported by truck over 16½ miles of Provincial Highway and 3 miles of Commission-built access road. This access road was opened to traffic in August 1958.

The powerhouse will form one section of the main dam. It will be separated by a plain bulkhead from the sluiceway section which will have seven sluices, two of them motor-operated. The motor-operated sluices will be capable of discharging

the full water requirement of the station under normal flow conditions, or 5,600 cfs. The seven together are designed to carry all river-flow under flood conditions. Two plain bulkheads tie the structure into the banks of the river, and the bulkhead adjoining the powerhouse will incorporate the log-chute.

#### THUNDER BAY GENERATING STATION—FORT WILLIAM

<i>Location</i>	—North shore of the Mission River in Fort William.
<i>Initial Installed Capacity</i>	—100,000 kilowatts in one unit, 60 cycles.
<i>In-Service Schedule</i>	—1961.
<i>Estimated Cost</i>	—\$26,000,000, including generation, step-up transformation, and high-voltage switching at the site.

Major items of equipment, including the turbo-alternator, steam generator, steam condenser, deaerator, and the turbine-house crane, have been purchased. The site has been prepared for construction work, and access roads and railway lines have been built. Dock construction is making good progress; pile-driving for this purpose was finished, and 15 per cent of the reinforced-concrete deck has been placed. Seventy-five per cent of the excavation in the powerhouse area was finished in preparation for pile-driving which is to commence in January 1959. In the outfall channel for the cooling water, about a third of the permanent steel sheet piling was driven and concrete beams were pre-cast. All work with the exception of the pile-driving was carried out by the Commission's construction forces.

### Extensions to Stations in Service

#### MANITOU FALLS GENERATING STATION (Capacity 65,700 kilowatts in 5 units)

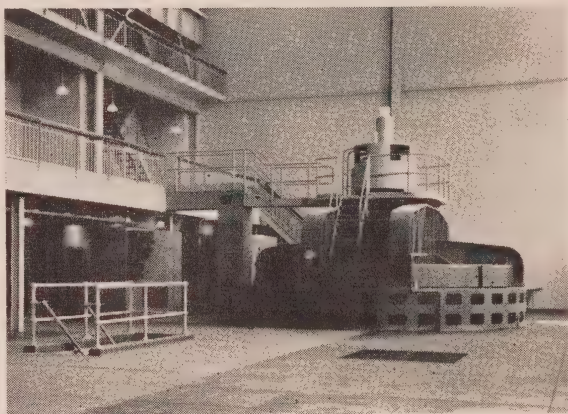
The station is located on the English River 20 miles down stream from Ear Falls.

The generator and auxiliary mechanical and electrical equipment for the fifth unit were installed and the unit was placed in service on March 17, 1958.

#### CAMERON FALLS GENERATING STATION (Capacity 76,700 kilowatts in 7 units) and

#### ALEXANDER GENERATING STATION (Capacity 60,900 kilowatts in 5 units)

These two stations, located some 65 miles northeast of Port Arthur, are on the Nipigon River, which flows from Lake Nipigon into Lake Superior. At each station the capacity has been increased by the addition of one unit. At Cameron Falls Generating Station concreting of the powerhouse headworks structure was completed. The turbine, the generator, and the auxiliary equipment, both mechanical and electrical, were installed. The unit was placed in operation on September 9. At Alexander Generating Station installation of the generator and auxiliary equipment was completed; the unit was placed in service on April 15.



ALEXANDER GENERATING STATION — An extension to the powerhouse now houses an additional generating unit, which, when completed in 1958, became the fifth unit in service at the station.

#### ABITIBI CANYON GENERATING STATION (Capacity 226,000 kilowatts in 5 units)

Work continued for the installation of a new 60-cycle generator in the No. 3 position formerly occupied by a 25-cycle unit. The latter had been removed and installed at DeCew Falls Generating Station to meet urgent power requirements during World War II. Following standardization of the DeCew Falls station at 60 cycles the turbine of this unit was returned to Abitibi Canyon Generating Station where it will be used to drive the new 60-cycle generator under operating conditions for which it was specifically designed.



## WHITEDOG FALLS GENERATING STATION

<i>Location</i>	—30 miles northwest of Kenora and 12 miles due east of the Manitoba boundary.
<i>Dependable Peak Capacity</i>	—53,700 kilowatts in three units, 60 cycles.
<i>Rated Head</i>	—50 feet.
<i>In Service</i>	—Unit No. 1, February 17; Unit No. 2, March 25; Unit No. 3, June 16, 1958.
<i>Cost at December 31, 1958.</i>	—\$21,250,000 including generation, step-up transformation, and high-voltage switching at the site.

Whitedog Falls Generating Station, on the Winnipeg River, is approximately 2 miles up stream from the confluence of the Winnipeg River with the English River. The selection of this site and the decision subsequently to develop 67,500 kilowatts at Caribou Falls on the English River represented one of several alternatives for the economic exploitation of the hydraulic head remaining on these two rivers. Previously consideration had been given to building a station at Boundary Falls some 14 miles down stream from the confluence of the rivers, thereby concentrating at one point the total flow of the Winnipeg River and the English River. This would have had certain economic advantages over the two-station development if the establishment of operators' colonies had been a consideration. The saving represented by establishing one colony instead of two was no longer relevant, however, when it was decided, in view of recent advances in techniques and equipment, to operate the stations by remote control. With the rapid growth in demand in the Northwestern Division there were also distinct advantages in bringing part of the total capacity more quickly into service by developing Whitedog Falls first and Caribou Falls later.

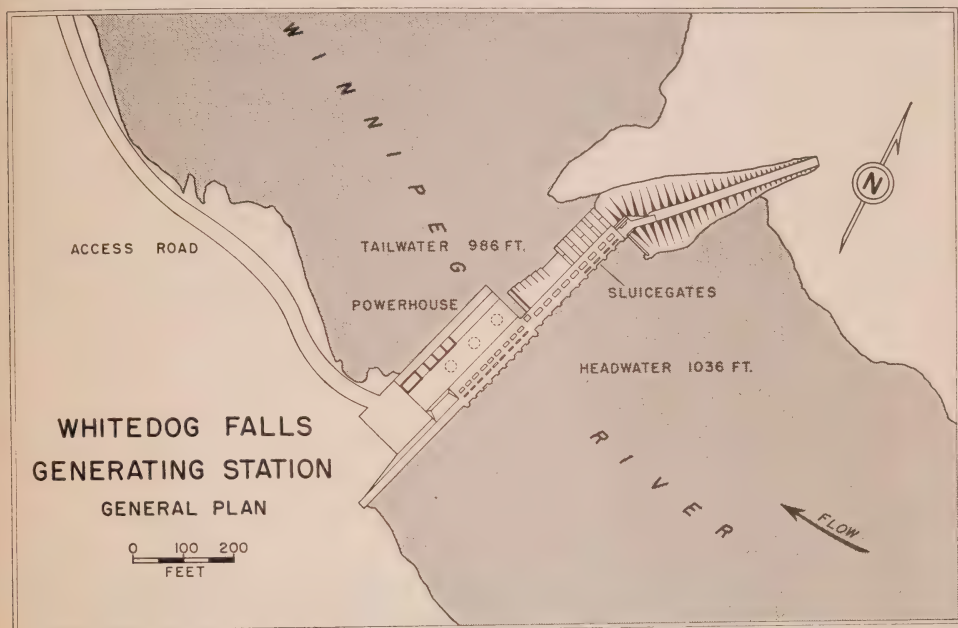
**Location**

The main dam spans the south channel of the river at the downstream end of Whitedog Island, some 30 miles northwest of Kenora. A rock-fill dam closes the north channel of the river at the upstream end of the island and an earth-fill dam closes off an area of low land on the island itself. Flow in the river, as regulated by the Lake of the Woods Control Board, averages 10,000 cfs. At maximum output the station will be capable of using 16,000 cfs. This peaking capacity will be used eventually to supplement base-load production in thermal-electric stations.

**Construction Schedule**

Work on the access road was begun in September 1955. This road extends, from a point on the Canadian National Railways about 2 miles west of Minaki, some 16 miles to the site.

Excavation of the diversion channel and construction of the four diversion sluices were carried out in the dry. Later the end plugs of the channel were removed and the river was allowed to flow through the partly finished diversion sluices, which eventually became part of the main sluiceway structure. The powerhouse area was then cofferdammed and excavated. Powerhouse construction was completed in 1957 and the first unit was placed in service in February 1958.



### Main Dam

The main dam extends 1,150 feet across the south channel of the river at the downstream end of Whitedog Island. It incorporates the powerhouse and headworks adjoining the south bank of the river, and a sluiceway section to the north separated from the powerhouse by a short bulk-head section. The ends of the structure are tied into the banks of the river by a concrete gravity section adjacent to the erection bay at the south shore, and at the north shore by an earth-fill section adjacent to the log-chute head-block. In the conventional headworks, served by a 40-ton travelling head-block. Intermediate piers divide each of the three intakes into three inlet bays. Each of the three headgates regulating flow to a turbine is operated by an electric hoist controlled from Kenora Switching Station. There are nine 18-foot main sluices, two of them equipped with motor-operated gates similarly remotely controlled. These two sluices are capable of discharging a flow equal to that required by the three units operating at rated capacity. The other seven sluices, equipped with steel gates operated by the headworks crane, can discharge a maximum of 60,000 cfs.

### Powerhouse Equipment

The three turbines, supplied by Dominion Engineering Company Limited, are of the vertical-shaft, fixed-blade, propeller type, each rated



at 27,000 brake horsepower under a net head of 50 feet. The underside of each blade is protected at the outer edge by a concentric strip of stainless steel 24 inches wide, two- to three-sixteenths of an inch thick, and fused on by electric arc. Its purpose is to minimize pitting by cavitation. The turbines are set in concrete scroll-cases, conventional in design, but unusual in one aspect of their construction, that the concrete roofs were completed in one pour rather than by the conventional four-segment method. The method used, involving the addition of an air-entraining agent and a small proportion of fly ash in the concrete, permitted a considerable saving in time and costly intricate formwork.

The 13.8-kv, 60-cycle, 105.9-rpm generators, supplied by Canadian Westinghouse Company Limited, are equipped to operate either as generators or as synchronous condensers. As generators they are each rated at 24,000 kva at 0.90 power factor, and as condensers at 15,000 kvar at zero power factor. The power is stepped up from 13.8 to 115 kv by a bank of three single-phase, 25,000-kva transformers on the downstream deck of the powerhouse. A 25-ton electric travelling gantry-crane serves the tail-race gates.

#### **Power into the System**

The 115-kv switchyard provides switching facilities for both Whitedog Falls and Caribou Falls Generating Stations. Two 115-kv transmission



**WHITEDOG FALLS GENERATING STATION** — In June 1958 the third and final generating unit was placed in service at this station, which will be operated by remote control from Kenora Switching Station.



circuits connect the switchyard with Kenora Switching Station, which is also the point from which the station is controlled. Remote control is maintained by a relay supervisory system using electric impulses over a relatively few signalling channels. The equipment, in addition to controlling electrically operated devices, will provide illuminated indication of device positions, and telemetering of electrical and mechanical quantities. This is the Commission's first installation of power-line carrier equipment using transistors, and its first remotely controlled station where control and telemetering signals are transmitted through carrier channels over the main power lines. The supervisory equipment will control operation of sluiceways, headways, turbines, generators, circuit-breakers, and associated electrical and mechanical devices.

#### CARIBOU FALLS GENERATING STATION

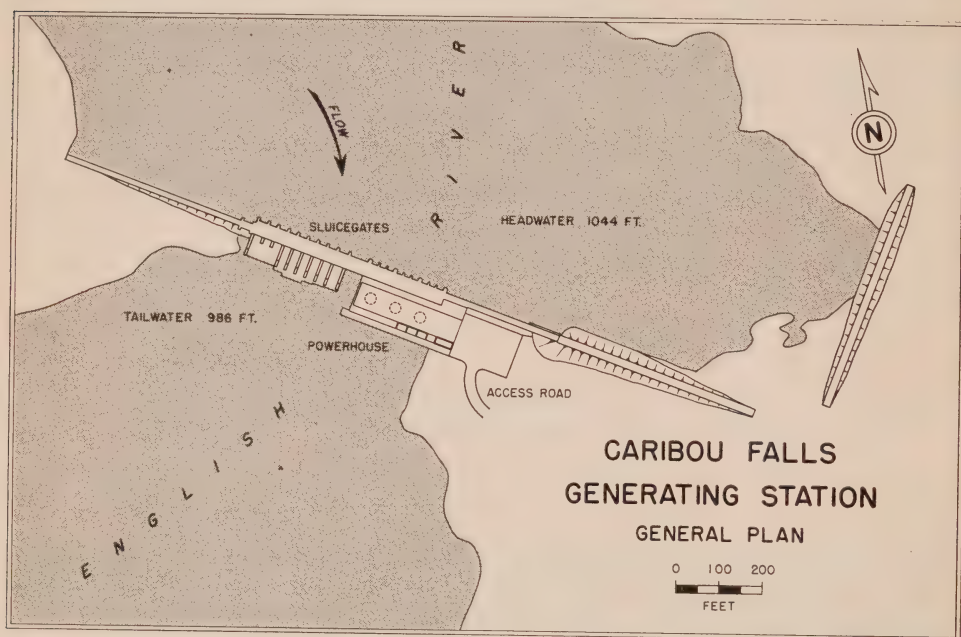
<i>Location</i>	—41 miles northwest of Kenora and 8 miles due east of the Manitoba boundary.
<i>Dependable Peak Capacity</i>	67,500 kilowatts in three units, 60 cycles.
<i>Rated Head</i>	—58 feet.
<i>In Service</i>	—Unit No. 1, July 27; Unit No. 2, September 11; Unit No. 3, October 11, 1958.
<i>Cost at December 31, 1958.</i>	—\$23,300,000 including generation, step-up transformation, and high-voltage switching at the site.

Caribou Falls Generating Station is the third of four developments planned by the Commission to exploit the 174.5-foot head available on the English River between the outlet from Lac Seul and the Manitoba boundary. The three stages represented by Ear Falls, Manitou Falls, and Caribou Falls Generating Stations have now developed 138.5 feet of the total available. The Lake St. Joseph diversion by which an average flow of about 2,800 cfs is diverted from the Albany River watershed into the English River has increased the capacity of all three stations.

#### Construction Schedule

The station is located about 8 miles east of the Manitoba boundary. Access to the site was provided by a 16-mile northwesterly extension of the road to Whitedog Falls. Work on the road was begun in the latter part of 1956. Clearing of the headpond area in conformity with regulations of the Provincial Department of Lands and Forests was begun at about the same time by a number of contractors. This area, stretching about 22 miles up stream from the powerhouse site and some 52,000 acres in extent, included, before construction of the station, 32,000 acres of water surface and about 18,000 acres of forest. All of the latter had been cleared of timber by the end of 1957. Payment to contractors was based on computations from photogrammetric surveys. This timber clearing operation was the largest of its kind ever undertaken by the Commission.

Construction of the project began in June 1956. Work was carried out in two stages. The first involved the cofferdamming of the powerhouse area and the erection in that part of the river channel of substructures for the powerhouse and seven adjoining sluices. The second stage involved cofferdamming the other part of the original channel and the construction of the remainder of the main dam and two additional sluices after the first cofferdams had been removed and the entire river-flow was permitted to pass through the first group of sluices.



### Main Dam and Powerhouse

The main dam comprises a conventional, 3-unit powerhouse with integral headworks, nine 18-foot control sluices, a gravity section at each end, and an earth-fill embankment at the approach from the east bank of the river. The sluices have a combined discharge capacity of 74,000 cfs. Two sluices, equipped with power-operated sluiceways controlled from Kenora Switching Station, are capable of discharging the flow requirement of the powerhouse in the event of a shut-down. The structure in general corresponds closely with that of Whitedog Falls Generating Station, the only major difference in design requirement being the 8-foot greater head at Caribou Falls. The turbines, incorporating relatively minor changes to allow for the consequent increased turbine discharge, were supplied by Dominion Engineering Company Limited, who also manufactured the Whitedog Falls turbines. Each turbine is rated at 34,000 brake horsepower. They are of the fixed-blade, propeller type, directly connected to 13.8-kv, 3-phase, 60-cycle generators rated at 28,500 kva at 0.90 power factor. The generators were supplied by Canadian General Electric Company Limited.

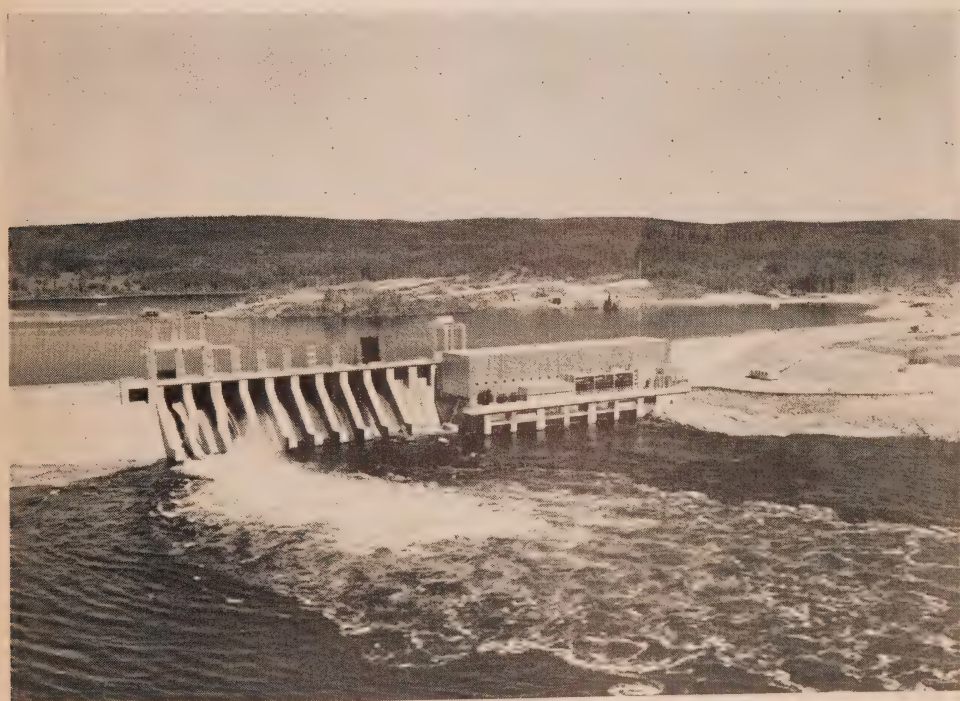
### Power into the System

One bank of three single-phase, 27,500-kva transformers, located on the downstream deck of the powerhouse, steps up the voltage from 13.8 to 115 kilovolts. A 115-kv transmission line carries the output of the station to the switching structure at White dog Falls Generating Station where switching facilities are provided for both stations. Two 115-kv transmission circuits connect this switchyard with Kenora Switching Station.

Caribou Falls Generating Station is remotely controlled from Kenora Switching Station by the same type of equipment used for the control of White dog Falls Generating Station. (q.v.)

### Transformer Stations and Transmission Lines

During 1958 approximately \$10 million was spent on transformation and transmission facilities in the northeastern and northwestern sections of the Province. As a result new load requirements were met and greater service security was achieved. Major items of equipment were installed at Kirkland Lake, Timmins, and Elliot Lake Transformer Stations in the northeast, and at Fort Frances and Port Arthur Transformer Stations in the northwest.

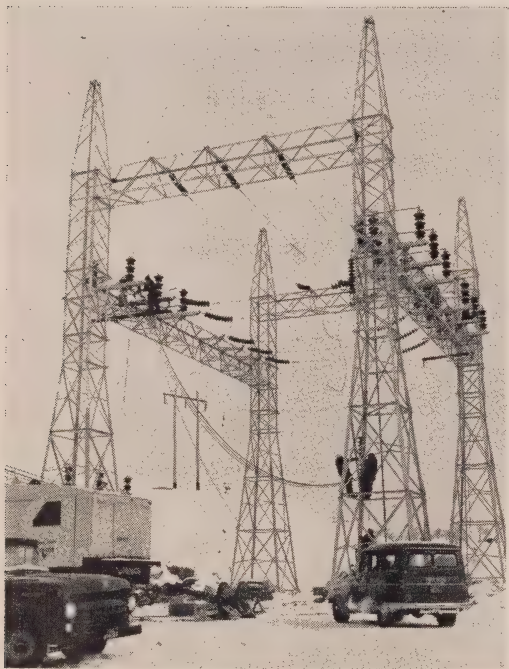


CARIBOU FALLS GENERATING STATION — Construction of this three-unit generating station on the English River was completed in October, 1958. The gravity-type dam structure is 1,260 feet long and incorporates 9 sluiceways. Operated by remote control from Kenora Switching Station, the station will have a dependable peak capacity of 67,500 kilowatts.



## Northeastern Division

The standardization of 25-cycle loads at 60 cycles in the northeast required the installation of additional transformation capacity at Timmins Transformer Station and the construction in total of about 70 miles of



Construction and maintenance crews work the year round in all types of weather. Here in the northwestern section of the Province work is carried out in a switchyard in sub-zero temperatures.

associated 115-kv line. Early in March two 14,500-kva, 115—26.4-kva transformers were placed in service at this station and the construction was completed for lines connecting Timmins Transformer Station with Kirkland Lake Transformer Station and Upper Notch Generating Station. In conjunction with this work a 75,000-kva voltage-regulating transformer was installed at Kirkland Lake Transformer Station to maintain voltages at appropriate levels. The voltage regulator will assist also in the control of voltage on circuits from Abitibi Canyon Generating Station when the incorporation of a 60-cycle generating unit there is completed.

During 1958, power consumption in the Blind River area on the north shore of Lake Huron increased steadily. At the end of the year it represented about 25 per cent of the customers'

demand in the northeast. To provide additional power, the Commission completed a 210-mile, 230-kv, single-circuit, wood-pole line to Blind River Transformer Station from Otto Holden Generating Station and increased the capacity of Elliot Lake Transformer Station, located in the heart of the mining area, to 45,000 kva. Three 15,000-kva, 115—44-kv transformers, together with 30,000 kvar of switched capacitors, now serve the area from Elliot Lake Transformer Station. Similar capacity was installed at Quirke Lake Transformer Station, which is located about 10 miles north of Elliot Lake and supplies power to the same area.

A 22-mile, 115-kv line from Abitibi Canyon Generating Station was cut through dense bush country in the fall of the year to supply construction power to the site of Otter Rapids Generating Station. This line and the 115-kv line from Abitibi Canyon Generating Station to Kirkland Lake Transformer Station will serve later to connect the new Otter Rapids Generating Station to the system; however, final transmission arrangements will depend on the economy of developing other sites situated north

of Abitibi Canyon. Already some consideration has been given to the possible construction of a central gathering station in the north and the transmission of power southwards at voltages up to 460 kv.

#### **Northwestern Division**

Final connections were made early in May for the new 115-kv lines and switching facilities in Fort William which supply power to several industrial users. Short lines from Fort William Switching Station were carried across the Kaministiquia River by means of two special steel towers one 229 feet in height and the other 209 feet with a line span of 1,381 feet. At Port Arthur Transformer Station No. 1 the capacity of the station was increased with the installation of two banks of three 14,000-kva, single-phase transformers. Two 15,000-kva transformer banks previously in use were removed.

Three 26,640-kva, single-phase, 110/121—44-kv auto-transformers were placed in service at Fort Frances Transformer Station in midsummer. The new transformers serve two purposes. They provide suitable voltage levels for the supply of power to the Ontario-Minnesota Pulp and Paper Company and they supply certain municipal and rural loads in the area west of Fort Frances.

In November, construction of a 115-kv, single-circuit transmission line was begun from Dryden Transformer Station to Sunstrum Junction, a distance of 17 miles. When completed early in 1959, the line will be operated at 44 kv to supply power to Sioux Lookout, Hudson Townsite, and Sioux Lookout R.O.A. It will also provide for future increases in power demands in this area.



**SILVER FALLS GENERATING STATION** — Washing down a finished section of the hydraulic tunnel which will carry water from Dog Lake to the powerhouse. The concreting of the tunnel to its finished diameter of 14.5 feet will be completed early in 1959.

## SECTION VI

### RESEARCH AND TESTING ACTIVITIES

THE facilities of the Commission's laboratories and the combined skills of research engineers, scientists, and technicians serve all branches of the organization for the purpose of analysing and solving many and varied problems relating to power-system operation. The work includes study of major aspects of the construction and maintenance of large power facilities, and evaluation of the performance of a wide variety of materials and supplies.

#### FURTHERANCE OF DESIGN WORK

##### **Extra-High-Voltage Transmission**

Preliminary studies of requirements for the Commission's first extra-high-voltage transmission system indicated that the specified voltage level may be higher than that of any system now in operation on this continent. Relatively large loads and long distances are involved and transmission facilities will represent a large part of total system cost. Economies resulting from refinement of the transmission-line design may, therefore, yield worthwhile savings.

Extensive study was given to many factors—radio interference, corona losses, and insulator losses—which have a bearing on design. In order to obtain detailed design data concerning these and other factors, proposed line designs will be tested at voltages up to 600 kv using a 1-mile full-scale test line equipped with the necessary facilities, which the Commission plans to build near Coldwater.



**Electric Water-Heater Units**

As part of the program to promote increased use of automatic electric water-heaters, the Commission established the basic requirements for units having a fast recovery feature. This feature considerably shortens the period necessary for re-establishing an adequate supply of hot water. In order to establish rates for the use of such equipment, extensive study was undertaken regarding the load characteristics of a representative group of customers' units meeting the new performance standards. On the basis of the Commission's experience over the past twenty years, new purchase specifications were developed for domestic water-heaters, one important consideration being the suitability of various types of tank for local water-supply conditions.

**Nuclear Power Development**

Assistance is being given to those agencies in Canada who are occupied in the development and construction of nuclear reactors. Consideration was given to the problem of aggregates for heavy concrete, and the analysis of reactor-vault stresses.

Aggregate studies have confirmed the suitability of hematite-ilmenite ore for the more commonly used heavy concrete (220 pounds per cubic foot). On the basis of tests, ferrosilicon is no longer being considered for the heavier concrete (300 pounds per cubic foot) for special shielding, and an alternative material, ferrophosphorus, is being investigated.

As a result of the reactor-vault study, instruments will be incorporated in the vault to measure the stresses caused by thermal gradients and by restraint during operation of the station.

**Code for Domestic Antennae and Supporting Structures**

Power interruptions resulting from radio and television antennae and supporting structures falling across power lines are of considerable concern to municipal electrical authorities. Following a survey in the Toronto area, recommended amendments to the present design code were drawn up in terms readily understandable by electrical inspectors and the general public. These have been circulated among municipal authorities to aid in drafting a practical code.

**Optimum Damping of Transmission-Line Vibration**

Further study of aeolian vibration of transmission lines has indicated that optimum economical damping requires neither the number nor the weight of torsional dampers commonly used. For most sizes of transmission-line conductors only one damper is required per conductor span instead of two, and for larger-size conductors the weight of each damper can be reduced by about 40 per cent. The use of silicone rubber in place of neoprene for damper washers offers possibilities for improved performance.

## AIDS TO MORE ECONOMICAL OPERATION

## Method for Optimum Scheduling of Hydraulic Power Production

A method based on dynamic programming and using the Commission's electronic computer has been developed whereby hour-by-hour allocations of available water can be made to the two main generating stations, the forebay, and the storage reservoir at the Sir Adam Beck-Niagara Generating Stations. The application of the method would permit the maximum economic power output to be realized over a given short scheduling period, 24 hours for example.



An oscillograph of the latest design, one of the "hot-pen" direct-writing types, with banks of amplifiers and calibrating units. It is used to investigate system stability and voltage fluctuation.

on the stabilization of in-place materials for road base-course construction.

## Fly-Ash Utilization

As the use of coal-burning stations is extended to meet the growth in power demands, the problem of disposing of fly ash produced by these stations will grow correspondingly. Fly ash is being used in the Commission's construction work in applications that are economically and technically feasible, and preparations are being made to extend its use wherever practical. At Otter Rapids Generating Station 12,000 tons will be used in the concrete. Efforts are being directed to developing a large-volume market for the material. Development work, which is well advanced, has been done on lightweight fly-ash aggregate and

## Improved System-Voltage Control with Load-Angle Limiter

For purposes of system-voltage control, reactive power is either obtained from or absorbed by synchronous condensers. A 10 to 20 per cent increase in the amount of reactive power which can be absorbed by condensers, with a resulting improvement in voltage control, was achieved by means of a load-angle limiter devised for the purpose. The use of this device will obviate the need in some locations for installing static reactors and larger condensers.

### Alternative Techniques for Application of Power-Line Carrier Signals

When power-line carrier channels are used for remote control of generating stations, adequate signal transmission must be maintained even during power-line faults. In a study of alternative techniques for achieving this end, the performances of line-to-line and line-to-ground coupled carrier systems were compared under simulated ground-fault conditions, with carrier equipment coupled to a de-energized 230-kv transmission line. It appears that, except for faults occurring close to the ends of the line, the line-to-ground coupling is almost as effective as the more expensive line-to-line coupling.

### Effects of Higher Operating Temperatures on Aluminum Steel-Reinforced Conductors

Investigation was undertaken regarding the possibility of increasing the maximum permissible operating temperatures for aluminum steel-reinforced conductors, even to the point of annealing the aluminum. Tests were made on one size of acsr both standard tempered and with the aluminum portion annealed; the breaking strength of aluminum-annealed acsr proved to be still sufficient for service conditions, though the conductor sag may be unacceptable for some locations. There was also some opening out or "bird caging" of the annealed aluminum strands after relatively high mechanical loads.

## IMPROVED MAINTENANCE PRACTICES

### Chemical Control of Conifers

The chemical herbicides 2,4-D and 2,4,5-T are effective for the control of deciduous growth but they have little effect on conifers such as spruce and balsam. Consequently these conifers have become the dominant vegetation on thousands of acres of the Commission's rights of way. A series of experimental-plot tests carried out over a five-year period has indicated that sodium trichloroacetate applied as a high-volume aqueous spray offers more satisfactory control than some twenty other likely chemicals tested. During the past two years sodium trichloroacetate applied in this manner was used successfully on about 4,000 acres of rights of way.



Ontario Hydro and commercial ground-line preservatives are tested on wood-pole stubs in this special test plot.



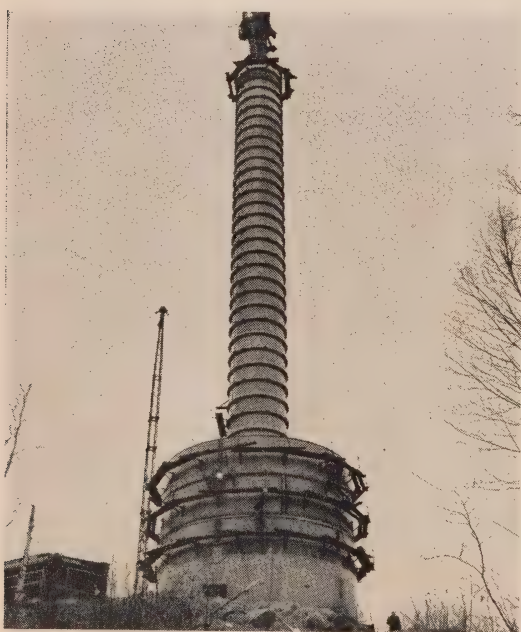
### Use of Epoxy Resin for In-Place Repair of Insulation

Insulation repair of various large items of electrical equipment by conventional methods is quite costly since it involves dismantling and reassembly. Furthermore, since it is not always practical to provide ready spare equipment, outages may be quite lengthy. The use of epoxy resin for in-place repairs has greatly reduced the difficulties, delays, and expense involved in former methods, and the possible extension of its use for in-place maintenance work on numerous items of electrical equipment could result in major savings.

### Prevention of Corrosion of Lead-Sheathed Underground Cable

Equipment designed and built for the purpose of testing the performance of different types of covers for the prevention of corrosion in lead-sheathed underground cable was also used to evaluate field methods of covering cable joints. An 18-month test program has established the superior effectiveness of extruded polyethylene and polyvinyl chloride covers for cables.

## ADVANCES IN CONSTRUCTION PROCEDURES

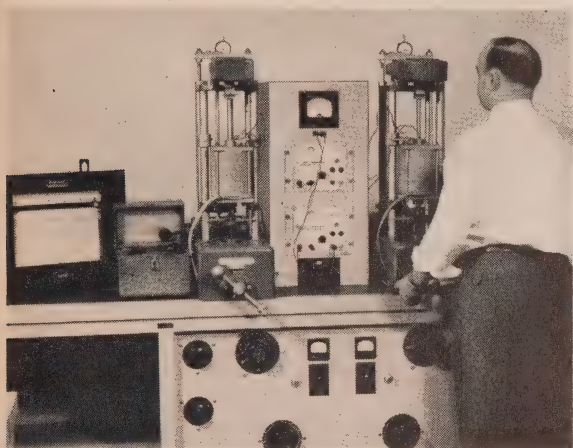


SILVER FALLS GENERATING STATION—A steel surge tank under construction near the powerhouse extends 90 feet down a shaft to the hydraulic tunnel. When completed it will prevent serious fluctuations in hydraulic pressure in the tunnel.

### Low-Lift Procedures in Mass-Concrete Construction

It has been the Commission's general practice to place mass concrete in high rather than in low lifts since the latter procedure requires special precautions to prevent vertical cracking. Objections to the use of low-lift placement have been largely overcome with the recent development of a modified low-lift procedure in which a limit is placed, not on the minimum period between lifts, but on the maximum period. This permits the principal advantages of both high- and low-lift placement to be realized. The new procedure will be used for the dam at Otter Rapids.

### Blasting and Fire Investigations



A researcher measures the slow elongation of metals which are subjected to a constant load at various temperatures.

To gain further knowledge of the effects of blasting, the Commission took advantage of the evacuation of the head-pond area of the St. Lawrence Power Project to arrange for staged tests. Controlled blasting was done in the vicinity of several abandoned buildings. The information obtained from these and other tests performed in the area will contribute to greater effectiveness in blasting operations in the future. Previously tests on other abandoned buildings had been staged for the National

Research Council and the Ontario Fire Marshal's office to provide valuable data on the early stages of combustion.

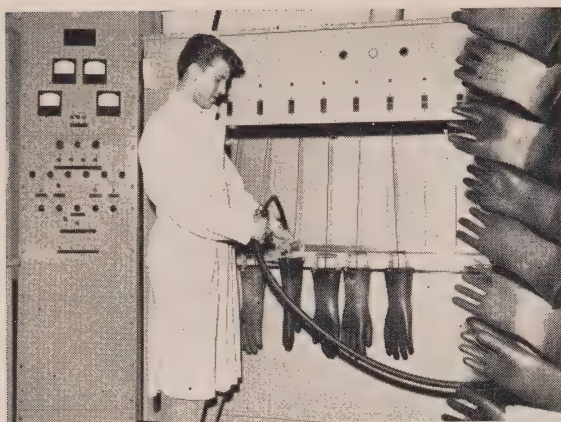
### OTHER INVESTIGATIONS

#### Air-Pollution Studies

Close co-operation is being maintained with government authorities and others active in air-pollution prevention. Laboratory studies were undertaken on the development, evaluation, and improvement of air-pollution measuring techniques. As part of an extensive long-term investigation a continuous record is being kept of air pollution in the vicinity of Richard L. Hearn Generating Station and in the area around the site of Lakeview Generating Station in order to relate present conditions with subsequent trends. The most important consideration is that air pollution shall not be increased significantly by expanded operation of coal-fired generating stations in the Toronto area.



Laboratory technicians analyse commercial lubricants.



A research technician prepares linemen's protective rubber gloves for dielectric-strength tests.

### **Insulating Materials Subject to Voltage Stress Under Outdoor Conditions**

A program of continuous high-voltage a-c and d-c tests of insulating materials exposed to outdoor conditions is in progress. These tests are the initial stages of an investigation into the possibility of using materials other than glass and porcelain for outdoor exposure under high-voltage stress. Results of the study will

also supplement present knowledge of the dielectric properties of the newer synthetic materials.

### **Single-Phase Load Characteristics of Rural Services**

As part of an extensive survey designed to obtain information on the load characteristics of single-phase rural services a one-year survey was completed in one rural operating area. The information will be used in the technical evaluation of watt-hour meters of various types and makes, in the determination of optimum meter ratings, and in the establishment of suitable maintenance schedules.



## SECTION VII

### STAFF RELATIONS

**T**HIS Section describes some of the special activities through which the Commission seeks to raise staff morale, enhance the level of employee effectiveness, and effect savings in the costs of operation. It tells also of the continuing efforts to reduce accidents and protect the health of employees. The achievements recorded throughout this Report are strong evidence of the continuing soundness of basic staff relations within the Commission.

#### **Employment Statistics**

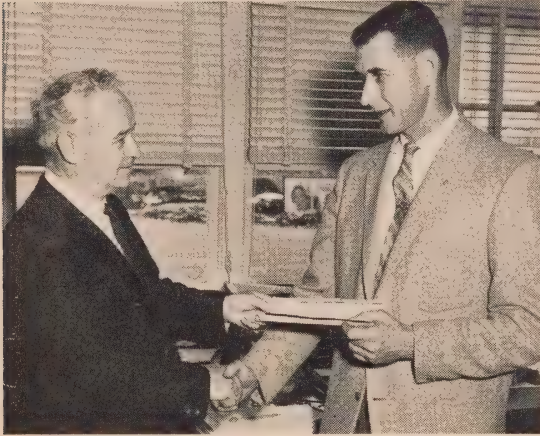
The maximum number of persons in the Commission's employ during 1958 was 18,731 in the month of July, when there were 4,759 employed as temporary construction workers, also a maximum for the year. The number of regular employees declined steadily from month to month throughout the year. The total staff over the twelve months on the average was 17,701, of whom 13,951 were regular and 3,750 were temporary employees. This represents a reduction in average total staff of about 9.7 per cent, as compared with 1957.

#### **Manpower Planning and Development**

One of the major problems confronting the Commission is the placement of persons who are being released in large numbers from duties on particular

undertakings, the St. Lawrence Power Project for example, which are now approaching completion. The importance to the organization of retaining the skill and experience of employees with several years' seniority and training is obvious. The Commission is also anxious, wherever possible, to relocate in the continuing organization those who have given years of outstanding service on such extensive temporary projects as frequency standardization. During 1958 about 840 persons were relocated in situations where they can work with advantage to the Commission and satisfaction to themselves. This has been a contributing factor in a 60 per cent reduction in the annual number of applicants hired from outside sources. With the increase in numbers of engineers and scientists available, the Commission has had no difficulty in meeting its requirements for engineers in the Junior Engineers Training Course. The number so engaged in 1958 was somewhat smaller than in 1957.

Study courses have been conducted for the purpose of broadening the experience and extending the skills of the staff. Over 500 persons at management levels have participated in this type of training. More than 800 tradesmen were occupied in formal training over and above regular on-the-job instruction in order to keep abreast of recent developments in trade techniques.



Commissioner D. P. Cliff congratulates H. L. Lidstone, winner of an award under the Commission's Suggestion Plan. In 1958 awards totalling \$10,677 were given for 165 approved suggestions received from employees.

Members of the staff at all levels of the organization are participating in increasing numbers in courses given by universities, trade schools, and management associations. Financial assistance is provided by the Commission in accordance with a scale based

on the applicability of the training to the participants' work. Within the Hydro organization seminars for engineering staff were held outside office hours to enable engineers and technicians to extend their knowledge of power-system operations and economics. The response to these seminars has been most gratifying.

#### **Employee Suggestion Plan**

Employees received 165 awards totalling nearly \$10,700 for valuable suggestions made under the plan inaugurated in June 1957. Four of these awards were maximum grants of \$1,000. In total, 1,782 suggestions were received during the year, an average of about 150 per month and one for every 10 employees. From every point of view the plan has proved most

successful—in stimulating employee interest, developing new approaches to problems, and achieving efficiency and economy in general. It is estimated that annual savings of \$82,000 will result from the suggestions adopted. A number of suggestions for patentable items were reviewed, and the Commission agreed to assist financially in three applications for patent.

#### **Area Work Standards Plan**

The area work standards plan is now in effect in all nine regions; it was introduced into three regions in 1958. Measured against a standard of efficient performance, the achievements of line crews varied widely. The staff has been interested and co-operative in the application of standard measurement so that considerable improvement in productivity has been recorded. If, as a result of developing standards for most of the routine work performed, improvements of this kind could be achieved, the saving in time and manpower would be substantial.

#### **Industrial Relations**

Negotiations for the renewal of collective agreements with unions representing the Commission's employees began early in February with the first discussion with the Ontario Hydro Employees Union, an affiliate of the National Union of Public Service Employees (CLC). Subsequently bargaining for the renewal of the collective agreements was begun in May with two locals of the International Union of Operating Engineers who represent stationary engineers and maintenance employees at the two large thermal-electric stations, and in July with the stationary engineers at Head Office. Agreements were signed with the representatives of the Head Office operating engineers in August and with the representatives of the generating stations employees in September.



The Commission maintains an extensive library of technical works relating to the production of electricity in all its phases.

The Ontario Hydro Employees Union, in the course of their negotiations, requested the conciliation services of the Ontario Department of Labour in the settlement of a number of items in dispute. Conciliation procedures had not achieved a settlement at the end of the year. In January, however, the Minister of Labour intervened to settle the points



at issue and agreement was reached in a memorandum of understanding which was implemented on February 26, 1959.

Joint Management-Union Committees continued to study topics of common concern such as job evaluation, problems of operating colonies, the transition to electronic data processing, safety rules, and standard protection.

The agreement between the Allied Construction Council and the Labour Relations Association-St. Lawrence Power Project was renewed without significant change, effective until January 26, 1959. The co-operation of the companies and the unions involved in this extensive construction undertaking has been a prime factor in expediting the completion of the work. The Provincial agreement covering employees of the Construction Division engaged on line and station construction and on other special projects expired on July 31, 1958. Renewal was delayed pending the settlement of a jurisdictional dispute between the Allied Construction Council and the Toronto Building and Construction Trades Council with respect to construction employees at Lakeview Generating Station.

Engineers in the service of the Commission constitute a professional group. Since it is the general practice of employers of large groups of professional engineers not to deal with them collectively, the Commission terminated its formal agreement with the Society of Ontario Hydro Professional Engineers on April 1, 1958. The Commission, however, continues to discuss matters of common interest with the Society, which represents the large group of engineers on the Commission staff. Regular meetings are held with the executive of the Society for this purpose.

#### **Accident Prevention**

The frequency ratio of accidents to man-hours worked in 1958 declined from that established in 1957, and was some 12 per cent below the average for the five-year period 1953 to 1957. In general, safety conditions on project work were improved.

The results of the unflagging program of driver testing and training are evident in the continued decline in motor vehicle accidents. The driving competitions in which employees have participated enthusiastically are also having beneficial results.

Three members of the staff were responsible for saving lives through the application of artificial respiration. Mr. Gordon Taylor was successful in reviving a 5-year-old girl, and Mr. Ronald Cable assisted his father in the resuscitation of a 9-year-old boy. Both of these children had been the victims of accidents while swimming. Mr. Robert Rowlandson was responsible for saving the life of a steam-shovel operator who suffered electric shock when his equipment came into contact with a high-voltage transmission line. Mr. Taylor will receive the National Safety Council President's medal, Mr. Cable was given a National Safety Council Certificate of Assistance, and Mr. Rowlandson a Canadian Electrical Association award.

Recognition was given by the Turtle Club to seven employees who escaped serious or fatal injury through the use of hard hats, and by the Wise Owl Club to one employee who avoided the loss of his sight by wearing safety goggles.

### **Medical Services**

The Commission's medical program is directed primarily towards maintaining a high standard of health among all employees. In addition to regular pre-employment medical examinations, of which there were 1,839 in 1958, periodic examinations were given to members of a selected group whose physical condition is kept under continuous review. The benefits arising from these periodic checks are quite evident.

A total of over 13,700 visits were made by employees to the various Commission medical centres in Metropolitan Toronto and 1,700 calls were made by the nursing staff to injured or ailing employees confined at home or in hospitals. No major epidemics affected the staff during 1958 and the level of general health was quite high.

With the sharp reduction in the scope of construction operations at the St. Lawrence Power Project at mid-year, the hospital at Cornwall was closed in June. The Whitedog Falls Generating Station hospital was also closed in October. At the Otter Rapids construction site a ten-bed hospital was opened in November to provide medical services for employees and their families. Other construction projects are equipped with first-aid posts, and at Silver Falls a physician is available on a part-time basis.

Courses in first-aid treatment were given to over 4,300 employees during the year.

The Commission's comprehensive hospital and medical insurance plan was modified in accordance with the requirements of the recently introduced Ontario Hospital Services Commission plan. The transfer of administration was completed without disturbance to the benefits provided under the former group scheme.





## APPENDIX I—OPERATIONS

THE tables in Appendix I are supplementary to the descriptive information on the year's operations given in Section I, and to information relating to the delivery of power and energy in wholesale quantities given in Section III.

The tables of power demands and resources give for each system and in total the primary peak requirements for the month of December, and the dependable capacity of the Commission's resources at the time these peak requirements occurred. A separate table on pages 112 and 113 gives the dependable capacity and the actual maximum output of each Commission-owned station and each source of purchased power. The dependable capacity of a station is the net output which it can be expected to supply at the time of the system primary peak requirements, assuming that all units are available and that the supply of water is normal. This capacity may be recalculated from time to time in accordance with changing conditions. The capacity of a source of purchased power is based on the terms of the purchase contract.

The Analysis of Energy Sales on pages 116 and 117 shows how the kilowatt-hours generated or purchased by the Commission and the associated municipal utilities were distributed to the various classes of ultimate customers or to interconnected systems.

Beginning on page 118 there is a table dealing primarily with the power and energy supplied in wholesale quantities to the municipal electrical utilities and local systems. It also records the date when power was first delivered by the Commission to each as a separate municipal system. The peak loads shown are those for December, the month when municipal maximum requirements usually occur, and not the average of the monthly peak loads used in the Cost of Power Statement.

Statistics of peak loads and capacities are given, as elsewhere in the Report, in kilowatts rather than in horsepower. The kilowatt figures may be converted to horsepower by assuming that one horsepower is equivalent to 0.746 kilowatts.

## THE COMMISSION'S POWER RESOURCES—1958

		Depend- able capacity*	Maximum output*	Annual energy output
Southern Ontario System		kw	kw	kwh
<i>River</i>	<i>Hydro-Electric Generating Stations</i>			
Niagara	†Sir Adam Beck—Niagara No. 1.....	441,000	430,000	3,183,268,800
	Sir Adam Beck—Niagara No. 2.....	1,336,000	1,302,000	8,102,063,600
	Pumping-Generating Station.....	168,000	162,000	76,113,600
	†Ontario Power.....	135,000	136,000	1,049,522,000
Welland Canal	†Toronto Power.....	108,000	107,000	582,329,400
	DeCew Falls No. 1.....	36,000	34,500	156,043,300
	DeCew Falls No. 2.....	120,000	134,000	735,325,600
Muskoka	Ragged Rapids.....	7,500	7,900	35,157,880
	Big Eddy.....	7,100	8,150	28,301,023
	Bala No. 1 and 2.....	350	0	0
South Muskoka	South Falls.....	4,200	4,450	27,133,040
	Trethewey Falls.....	1,600	1,600	9,739,200
	Hanna Chute.....	1,200	1,400	6,725,100
Beaver	Eugenia.....	5,400	5,120	17,849,600
Severn	Big Chute.....	4,300	4,440	26,742,800
Saugeen	Walkerton.....	350	0	0
	Hanover.....	250	150	908,400
Magnetawan	Burks Falls.....	250	135	492,000
Trent	Heely Falls.....	11,150	12,000	58,208,820
	Ranney Falls.....	8,350	8,820	47,153,460
	Meyersburg.....	5,100	5,925	32,604,420
	Sidney.....	3,350	3,575	18,930,600
	Hagues Reach.....	3,250	3,825	20,246,410
	Seymour.....	2,950	3,175	17,478,240
	Frankford.....	2,550	2,850	14,721,600
	Sills Island.....	1,550	945	5,925,220
	Auburn.....	1,750	1,765	9,522,200
Otonabee	Lakefield.....	1,650	1,500	6,983,640
	Fenelon Falls.....	700	365	2,866,900
St. Lawrence	Robert H. Saunders-St. Lawrence...	409,000	376,000	1,047,666,500
Ottawa	Des Joachims.....	372,000	375,000	2,238,535,800
	Otto Holden.....	210,000	218,000	1,151,251,700
	Chenau.....	117,000	117,000	750,793,600
	†Chats Falls (Ontario half).....	82,000	85,000	512,542,250
Madawaska	Stewartville.....	63,000	65,000	259,903,400
	Barrett Chute.....	42,000	41,750	227,770,200
	Calabogie.....	4,400	4,530	28,977,300
Mississippi	High Falls.....	2,450	2,800	14,890,560
	Galetta.....	800	635	4,418,200
Rideau	Merrickville.....	900	720	3,337,990
Total hydro-electric.....		3,722,400	.....	20,360,217,153
<i>Location</i>	<i>Thermal-Electric Generating Stations</i>			
Windsor	J. Clark Keith (steam).....	244,000	128,000	138,386,200
Toronto	Richard L. Hearn (steam).....	372,000	390,000	463,005,400
Total thermal-electric.....		616,000	.....	601,391,600
Total Southern Ontario System.....		4,338,400	.....	20,961,608,753

† 25 cycle.

‡ 25 and 60 cycle.

\* The power capacity and output referred to in this table are 20-minute peaks for the month of December. Since the various maximum outputs do not coincide, their sum is not the peak load of the system.

## THE COMMISSION'S POWER RESOURCES—1958

		Depend- able capacity*	Maximum output*	Annual energy output
<b>Northern Ontario Properties</b>				
<b>NORTHEASTERN DIVISION</b>				
<i>River</i>	<i>Hydro-Electric Generating Stations</i>	kw	kw	kwh
Abitibi	†Abitibi Canyon.....	181,000	175,000	1,224,560,000
Mississagi	George W. Rayner.....	47,000	47,400	252,126,470
Mattagami	†Wawatim.....	10,800	9,200	52,537,384
	†Lower Sturgeon.....	6,000	6,000	43,159,041
	†Sandy Falls.....	2,700	2,700	17,801,784
Montreal	Upper Notch.....	8,400	8,300	54,886,000
	Hound Chute.....	3,600	3,740	27,155,200
	Indian Chute.....	3,000	3,000	21,179,000
	Fountain Falls.....	2,000	2,000	16,288,770
Wanapitei	Stinson.....	5,700	4,830	17,617,260
	Coniston.....	4,100	4,200	20,124,980
	McVittie.....	2,200	2,300	12,701,320
Matabitchuan	Matabitchuan.....	8,800	6,640	51,505,580
Sturgeon	Crystal Falls.....	8,200	5,550	40,642,300
South	Nipissing.....	1,600	1,590	11,399,840
	Elliott Chute.....	1,400	1,380	6,248,200
	Bingham Chute.....	900	940	5,120,920
Kagawong	Kagawong.....	.....	470	3,691,080
Total hydro-electric.....		297,400	.....	1,878,745,129
<i>Location</i>	<i>Diesel-Electric Generating Stations</i>			
Kagawong	Kagawong (diesel portion).....	300	0	2,240
Chapleau	Chapleau.....	500	407	997,600
Hornepayne	Hornepayne.....	1,000	561	2,915,000
Total diesel-electric.....		1,800	.....	3,914,840
Total Northeastern Division.....		299,200	.....	1,882,659,969
<b>NORTHWESTERN DIVISION</b>				
<i>River</i>	<i>Hydro-Electric Generating Stations</i>			
Nipigon	Pine Portage.....	119,200	121,000	756,833,640
	Cameron Falls.....	76,700	74,500	426,394,800
	Alexander.....	60,900	65,300	400,593,800
English	Caribou Falls.....	67,500	82,000	137,194,200
	Manitou Falls.....	65,700	64,500	337,217,650
	Ear Falls.....	15,900	16,500	104,830,200
Winnipeg.....	Whitedog Falls.....	53,700	42,000	183,982,300
Aguasabon	Aguasabon.....	44,000	46,100	312,939,920
Kaministiquia	Kakabeka Falls.....	25,000	16,300	138,879,100
Albany	Rat Rapids.....	.....	0	233,368
Total Northwestern Division.....		528,600	.....	2,799,098,978
Total generated—All systems.....		5,166,200	.....	25,643,367,700
<b>Sources of Purchased Power</b>				
<b>SOUTHERN ONTARIO SYSTEM</b>				
Detroit Edison Company.....		.....	96,000	197,053,000
Polymer Corporation.....		.....	1,900	15,442,000
Niagara Mohawk Power Corporation.....		.....	129,000	29,274,000
†Canadian Niagara Power Company, Limited.....		15,000	23,000	30,057,000
Power Authority of the State of New York.....		.....	0	0
†Quebec Hydro-Electric Commission.....		187,000	412,000	2,655,345,000
†Gatineau Power Company.....		213,000	236,600	1,468,225,000
†MacLaren-Quebec Power Company.....		93,000	106,500	697,769,000
†Ottawa Valley Power Company.....		82,000	85,000	516,736,150
Miscellaneous (relatively small suppliers).....		2,000	0	14,640,853
Total Southern Ontario System.....		592,000	.....	5,624,542,003
<b>NORTHERN ONTARIO PROPERTIES</b>				
<b>NORTHEASTERN DIVISION</b>				
†Abitibi Power & Paper Company, Limited.....		.....	9,500	5,665,040
†Quebec Hydro-Electric Commission.....		.....	32,000	137,330,871
Miscellaneous (relatively small suppliers).....		1,200	1,080	8,230,748
Total Northeastern Division.....		1,200	.....	151,226,659
<b>NORTHWESTERN DIVISION</b>				
Ontario-Minnesota Pulp and Paper Company.....		1,700	1,421	14,757,925
Manitoba Hydro-Electric Board.....		.....	6,000	16,485,559
Total Northwestern Division.....		1,700	.....	31,243,484
Total purchased—All systems.....		594,900	.....	5,807,012,146
Total generated and purchased—All systems.....		5,761,100	.....	31,450,379,846



## POWER RESOURCES

		December dependable		
		Commission stations		
		Hydro-electric	Thermal-electric†	Total
		kw	kw	kw
Southern Ontario System	1958	3,722,400	616,000	4,338,400
	1957	2,967,400	616,000	3,583,400
Northern Ontario Properties				
Northeastern Division	1958	297,400	1,800	299,200
	1957	297,400	1,800	299,200
Total—Combined systems	1958	4,019,800	617,800	4,637,600
	1957	3,264,800	617,800	3,882,600
Net increase or decrease				
Southern Ontario System		755,000	0	755,000
Northeastern Division		0	0	0
Combined Systems		755,000	0	755,000
Northern Ontario Properties				
Northwestern Division	1958	528,600	0	528,600
	1957	366,000	0	366,000
Net increase or decrease				
Northwestern Division		162,600	0	162,600
Total—All systems	1958	4,548,400	617,800	5,166,200
	1957	3,630,800	617,800	4,248,600

\* The capacities shown are those available for a 20-minute period at the times of system primary peak demand in each of the three operating systems in December, the capacity of sources of purchased power being based on the terms of the purchase contract. Requirements shown are the December coincident peaks for each system and their arithmetic sum.

## ANNUAL ENERGY

## Energy Made Available by the Commission

	1957		1958		Increase or Decrease
	kwh		kwh		per cent
<b>SOUTHERN ONTARIO SYSTEM</b>					
Generated (net)					
hydro-electric	20,430,075,439		20,360,217,153		0.3
thermal-electric	1,459,977,900		601,391,600		58.8
Total generated	21,890,053,339		20,961,608,753		4.2
Purchased	4,585,966,580		5,624,542,003		22.6
Transferred* in or out (net)	759,884,000		1,099,669,000		44.7
Primary		22,076,428,819		22,633,438,156	2.5
Secondary		3,639,707,100		2,853,043,600	21.6
Total	25,716,135,919	25,716,135,919	25,486,481,756	25,486,481,756	0.9
<b>NORTHERN ONTARIO PROPERTIES</b>					
<b>NORTHEASTERN DIVISION</b>					
Generated (net)					
hydro-electric	1,846,716,045		1,878,745,129		1.7
diesel-electric	3,335,690		3,914,840		17.4
Total generated	1,850,051,735		1,882,659,969		1.8
Purchased	209,689,401		151,226,659		27.9
Transferred* in or out (net)	759,884,000		1,099,669,000		44.7
Primary		2,791,545,958		3,034,644,968	8.7
Secondary		28,079,178		98,910,660	252.3
Total	2,819,625,136	2,819,625,136	3,133,555,628	3,133,555,628	11.1
<b>NORTHWESTERN DIVISION</b>					
Generated (net)					
hydro-electric	2,472,296,310		2,799,098,978		13.2
Purchased	92,699,394		31,243,484		66.3
Primary		2,536,961,644		2,713,801,843	7.0
Secondary		28,034,060		116,540,619	315.7
Total	2,564,995,704	2,564,995,704	2,830,342,462	2,830,342,462	10.3
<b>ALL SYSTEMS</b>					
Generated (net)					
hydro-electric	24,749,087,794		25,038,061,260		1.2
thermal and diesel-electric	1,463,313,590		605,306,440		58.6
Total generated	26,212,401,384		25,643,367,700		2.2
Purchased	4,888,355,375		5,807,012,146		18.8
Primary		27,404,936,421		28,381,884,967	3.6
Secondary		3,695,820,338		3,068,494,879	17.0
Total	31,100,756,759	31,100,756,759	31,450,379,846	31,450,379,846	1.1

\* Net interchange between Southern Ontario System and Northeastern Division of the Northern Ontario Properties.

## AND REQUIREMENTS

capacity*		Primary power requirements*	Reserve	Ratio of reserve to requirements
Sources of purchased power	Total dependable capacity*			
kw	kw	kw	kw	per cent
592,000	4,930,400	4,252,715	.....	.....
591,000	4,174,400	3,917,464	.....	.....
1,200	300,400	437,468	.....	.....
1,200	300,400	459,117	.....	.....
593,200	5,230,800	4,690,183	540,617	11.5
592,200	4,474,800	4,376,581	98,219	2.2
1,000	756,000	335,251	.....	.....
0	0	21,649	.....	.....
1,000	756,000	313,602	442,398	.....
1,700	530,300	448,821	81,479	18.2
3,300	369,300	406,880	37,580	9.2
1,600	161,000	41,941	119,059	.....
594,900	5,761,100	5,139,004	**	**
595,500	4,844,100	4,783,461	**	**

\*\*There is no interconnection between the Northwestern Division and the other operating systems of the Commission.

†Includes diesel-electric.

## ACCOUNT

## Energy Disposed of by the Commission in Wholesale Quantities

	1957	1958	Increase or Decrease
	kwh	kwh	per cent
<b>SOUTHERN ONTARIO SYSTEM</b>			
Primary—Municipal electrical utilities.....	13,070,004,020	13,976,502,536	6.9
—Local systems.....	4,228,836	4,268,080	0.9
—Interconnected systems, for resale.....	409,848,503	409,054,841	0.2
—Rural operating areas.....	1,975,428,718	2,185,504,319	10.6
—Direct industrial customers.....	4,729,240,185	4,145,112,482	12.4
Total primary.....	20,188,750,262	20,720,442,258	2.6
Secondary—Interconnected systems, for resale.....	3,486,071,200	2,701,329,000	22.5
—Direct industrial customers.....	1,371,900	32,052,900	.....
Total secondary.....	3,487,443,100	2,733,381,900	21.6
Total primary and secondary.....	23,676,193,362	23,453,824,158	0.9
Losses and unaccounted for.....	2,039,942,557	2,032,657,598	0.4
Total.....	25,716,135,919	25,486,481,756	0.9
<b>NORTHERN ONTARIO PROPERTIES</b>			
<b>NORTHEASTERN DIVISION</b>			
Primary—Municipal electrical utilities.....	264,936,472	286,561,147	8.2
—Local systems.....	141,081,442	161,480,128	14.5
—Interconnected systems, for resale.....	12,502,278	13,936,200	11.5
—Rural operating areas.....	175,050,243	229,023,868	30.8
—Direct industrial customers.....	1,878,961,412	2,001,232,673	6.5
Total primary.....	2,472,531,847	2,692,234,016	8.9
Secondary—Interconnected systems, for resale.....	.....	.....	.....
—Direct industrial customers.....	22,545,304	96,123,307	326.4
Total secondary.....	22,545,304	96,123,307	326.4
Total primary and secondary.....	2,495,077,151	2,788,357,323	11.8
Losses and unaccounted for.....	324,547,985	345,198,305	6.4
Total.....	2,819,625,136	3,133,555,628	11.1
<b>NORTHWESTERN DIVISION</b>			
Primary—Municipal electrical utilities.....	416,023,634	443,819,260	6.7
—Local systems.....	14,094,324	16,369,460	16.1
—Interconnected systems, for resale.....	2,490,373	.....	.....
—Rural operating areas.....	52,547,382	68,167,879	29.7
—Direct industrial customers.....	1,833,536,794	1,971,552,080	7.5
Total primary.....	2,318,692,507	2,499,908,679	7.8
Secondary—Interconnected systems, for resale.....	.....	36,208,938	.....
—Direct industrial customers.....	24,195,490	70,077,354	189.6
Total secondary.....	24,195,490	106,286,292	339.3
Total primary and secondary.....	2,342,887,997	2,606,194,971	11.2
Losses and unaccounted for.....	222,107,707	224,147,491	0.9
Total.....	2,564,995,704	2,830,342,462	10.3
<b>ALL SYSTEMS</b>			
Primary.....	24,979,974,616	25,912,584,953	3.7
Secondary.....	3,534,183,894	2,935,791,499	16.9
Losses and unaccounted for.....	2,586,598,249	2,602,003,394	0.6
Total.....	31,100,756,759	31,450,379,846	1.1

**ANALYSIS OF**  
**by the Commission and Associated**

	Sales by utilities listed in Statement A	Sales by The
		Through local systems
	kwh	kwh
Classes of ultimate customers served:		
Domestic.....	5,985,278,843	102,936,650
Hamlet and rural residential.....	.....	.....
Summer.....	.....	.....
Total sales domestic-type service.....	5,985,278,843	102,936,650
Commercial.....	2,400,905,170	47,005,493
Power—primary.....	5,633,131,279	18,612,111
—Secondary.....	.....	.....
Farm.....	.....	.....
Street lighting.....	220,551,167	2,573,056
Total sales to ultimate customers served....	14,239,866,459	171,127,310
Delivered to interconnected systems for resale:		
Primary.....	.....	.....
Secondary.....	.....	.....
Total sales to ultimate customers and for resale..	14,239,866,459	171,127,310†
Distribution losses and unaccounted for.....	860,444,721	10,990,358
	15,100,311,180	182,117,668
<b>Reconciliation</b>		
Generated by utilities listed in Statement A ...	198,056,445	.....
Purchased by utilities listed in Statement A from sources other than the Commission.....	195,371,792	.....
Disposed of by the Commission.....	*14,706,882,943†	*182,117,668
	15,100,311,180	182,117,668

\* These totals are the sums of the corresponding items shown on the preceding page for each of the three operating systems. The total disposed of by the Commission 28,848,376,452 kilowatt-hours, plus transmission losses and unaccounted for amounting to 2,602,003,394 kilowatt-hours equals the 31,450,379,846 kilowatt-hours shown as generated and purchased.



## ENERGY SALES

## Municipal Electrical Utilities during 1958

Hydro-Electric Power Commission of Ontario			Total
In rural areas	To direct industrial customers	To inter-connected systems for resale	
kwh	kwh	kwh	kwh
.....	.....	.....	6,088,215,493
931,982,764	.....	.....	931,982,764
55,296,983	.....	.....	55,296,983
987,279,747	.....	.....	7,075,495,240
260,338,850	.....	.....	2,708,249,513
278,005,882	8,117,897,235	.....	14,047,646,507
.....	198,253,561	.....	198,253,561
743,639,744	.....	.....	743,639,744
9,365,308	.....	.....	232,489,531
2,278,629,531	8,316,150,796	.....	25,005,774,096
.....	.....	422,991,041	422,991,041
.....	.....	2,737,537,938	2,737,537,938
2,278,629,531†	8,316,150,796†	3,160,528,979†	28,166,303,075
204,066,535	.....	.....	1,075,501,614
2,482,696,066	8,316,150,796	3,160,528,979	29,241,804,689
.....	.....	.....	198,056,445
.....	.....	.....	195,371,792
*2,482,696,066	*8,316,150,796	*3,160,528,979	*28,848,376,452
2,482,696,066	8,316,150,796	3,160,528,979	29,241,804,689

† The sum of the five totals so marked, 28,633,319,559 kwh, represents the total sales, wholesale and retail, by the Commission.

## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Frequency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM		cycles	kw	'000 kwh	per cent
Acton.....	Jan. 1913	60	3,676.7	15,096	5.9
Ailsa Craig.....	Jan. 1916	60	287.1	974	3.3
Ajax.....	Jan. 1952	60	5,284.6	24,719	9.5
Alexandria.....	Jan. 1921	60	1,477.2	6,350	10.5
Alfred.....	June 1952	60	348.3	1,059	8.0
Alliston.....	June 1918	60	1,657.0	7,934	12.0
Almonte.....	Feb. 1945	60	1,543.5	4,939	7.0
Alvinston.....	Apr. 1922	60	268.2	828	2.2
Amherstburg.....	Feb. 1919	60	3,091.4	15,625	5.5
Ancaster Twp.....	Jan. 1914	60	2,239.2	8,820	9.3
Apple Hill.....	Apr. 1921	60	100.3	350	13.7
Arkona.....	Dec. 1926	60	290.1	1,094	18.3
Arnprior.....	June 1929	60	3,835.9	16,767	3.7
Arthur.....	Dec. 1916	60	693.3	2,642	5.6
Athens.....	Jan. 1929	60	419.9	1,513	8.7
Aurora.....	Dec. 1920	60	3,737.1	16,517	9.2
Aylmer.....	Mar. 1918	60	4,255.5	16,822	19.3
Ayr.....	Jan. 1915	60	697.5	2,394	10.8
Baden.....	May 1912	60	849.6	2,835	40.5
†Bala.....	Apr. 1929	60	302.3	1,780	8.1
Bancroft.....	Mar. 1950	60	1,291.0	4,853	92.7
Barrie.....	Apr. 1913	60	14,918.0	72,261	12.2
Barry's Bay.....	Jan. 1950	60	319.3	1,176	12.1
Bath.....	Nov. 1931	60	314.9	1,141	4.7
Beachville.....	Aug. 1912	60	2,457.6	14,688	35.4
Beamsville.....	Jan. 1930	60	1,524.0	6,576	5.5
Beaverton.....	Nov. 1914	60	1,057.5	4,172	9.4
Beeton.....	Aug. 1918	60	443.5	1,649	11.2
Belle River.....	Dec. 1922	60	591.4	2,654	7.3
Belleville.....	Mar. 1916	60	16,842.6	81,413	4.5
Blenheim.....	Nov. 1915	60	1,535.2	5,473	2.7
Bloomfield.....	Apr. 1919	60	417.5	1,595	9.5
Blyth.....	July 1924	60	559.5	2,448	13.6
Bobcaygeon.....	July 1946	60	637.4	2,740	12.9
Bolton.....	Feb. 1915	60	1,041.4	3,656	18.1
Bothwell.....	Sep. 1915	60	441.6	1,261	0.9
Bowmanville.....	Mar. 1916	60	5,832.0	25,022	2.4
Bracebridge.....	June 1955	60	43.9	30	92.1
Bradford.....	Oct. 1918	60	1,642.0	6,785	11.6
Braeside.....	June 1929	60	336.3	1,239	23.6
Brampton.....	Nov. 1911	60	10,884.8	41,587	5.7
Brantford.....	Feb. 1914	60	42,456.5	197,064	5.0
Brantford Twp.....	Oct. 1915	60	4,520.5	20,367	11.0
Brechin.....	Jan. 1915	60	125.5	474	4.7
Bridgeport.....	Mar. 1928	60	795.0	2,907	5.5

† Local system

TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Brigden.....	Jan. 1918	60	232.0	832	11.1
Brighton.....	Mar. 1916	60	1,276.0	5,588	5.9
Brockville.....	Apr. 1915	60	14,490.0	68,546	10.0
Bronte.....	Jan. 1930	60	992.6	4,030	10.1
Brussels.....	July 1924	60	594.2	2,274	10.3
Burford.....	June 1915	60	787.8	2,792	9.5
Burgessville.....	Nov. 1916	60	187.9	570	12.6
Burk's Falls.....	Jan. 1950	60	452.2	1,643	7.5
Burlington.....	Jan. 1930	60	27,394.9	46,567	*63.7
Caledonia.....	Oct. 1912	60	997.0	4,222	6.8
Campbellville.....	Jan. 1925	60	159.6	580	10.2
Cannington.....	Nov. 1914	60	612.5	2,360	3.0
Cardinal.....	July 1930	60	940.2	4,070	7.8
Carleton Place.....	May 1919	60	2,987.0	14,024	1.9
Casselman.....	Dec. 1952	60	479.3	2,106	12.4
Cayuga.....	Nov. 1924	60	382.6	1,524	11.4
Chalk River.....	Jan. 1957	60	393.0	1,772	8.3
Chatham.....	Feb. 1915	60	16,889.6	73,145	3.1
Chatsworth.....	Dec. 1915	60	284.0	987	6.2
Chesley.....	July 1916	60	1,127.0	4,352	4.4
Chesterville.....	Apr. 1914	60	1,075.9	4,998	9.7
Chippawa.....	Sep. 1919	60	1,118.0	4,530	9.6
Clifford.....	May 1924	60	385.0	1,478	19.5
Clinton.....	Mar. 1914	60	2,071.9	9,231	8.6
Cobden.....	Dec. 1934	60	588.2	2,146	10.1
Cobourg.....	Mar. 1916	60	7,715.4	37,626	9.3
Colborne.....	Mar. 1916	60	801.2	3,510	10.4
Coldwater.....	Mar. 1913	60	543.7	1,947	30.4
Collingwood.....	Mar. 1913	60	5,988.3	25,706	11.4
Comber.....	May 1915	60	255.0	968	1.4
Cookstown.....	May 1918	60	324.6	1,190	1.9
Cottam.....	Feb. 1919	60	248.0	871	8.2
Courtright.....	Dec. 1923	60	192.2	649	9.3
Creemore.....	Nov. 1914	60	483.6	1,890	10.1
Dashwood.....	Sep. 1917	60	248.0	853	10.9
Deep River.....	Aug. 1958	60	3,273.0	5,762	....
Delaware.....	Mar. 1915	60	257.2	853	12.1
Delhi.....	May 1938	60	2,508.4	9,590	6.6
Deseronto.....	Mar. 1916	60	882.5	4,269	15.6
Dorchester.....	Dec. 1914	60	400.6	1,389	10.4
Drayton.....	Mar. 1918	60	384.8	1,177	5.4
Dresden.....	Apr. 1915	60	1,080.5	4,785	4.3
Drumbo.....	Dec. 1914	60	248.9	792	12.2
Dublin.....	Oct. 1917	60	242.6	859	15.8
Dundalk.....	Dec. 1915	60	497.4	1,853	4.0

\* A large number of customers former'y served by rural facilities were transferred to the municipality November 1, 1958.



## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Frequency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Dundas.....	Jan. 1911	60	7,135.7	28,923	1.1
Dunnville.....	June 1918	60	3,532.4	15,293	7.8
Durham.....	Dec. 1915	60	1,504.4	5,701	6.8
Dutton.....	Sep. 1915	60	424.2	1,516	11.3
East York Twp.....	Dec. 1923	60	39,723.0	175,571	5.5
Eganville.....	Apr. 1952	60	497.3	1,890	17.6
Elmira.....	Nov. 1913	60	3,370.0	13,866	4.1
Elmvale.....	June 1913	60	577.0	2,301	8.6
Elmwood.....	Apr. 1918	60	193.9	522	2.6
Elora.....	Nov. 1914	60	739.6	3,022	3.7
Embro.....	Jan. 1915	60	378.6	1,403	4.9
Erieau.....	July 1924	60	328.0	1,550	1.5
Erie Beach.....	July 1925	60	53.0	171	10.7
Erin.....	Jan. 1945	60	554.1	2,051	13.3
Essex.....	Feb. 1919	60	1,482.4	6,683	5.9
Etobicoke Twp.....	Aug. 1917	60	105,563.5	498,882	14.0
Exeter.....	June 1916	60	1,981.4	8,093	5.0
Fergus.....	Nov. 1914	60	3,364.0	12,792	8.2
Finch.....	Feb. 1928	60	254.6	895	11.2
Flesherton.....	Dec. 1915	60	349.0	1,161	3.7
Fonthill.....	June 1926	60	1,275.8	4,897	10.4
Forest.....	Mar. 1917	60	1,288.0	6,223	5.4
Forest Hill.....	Jan. 1938	60	13,521.0	65,040	3.2
Frankford.....	Oct. 1937	60	674.0	2,492	9.3
Galt.....	May 1911	60	21,265.9	89,434	3.4
Georgetown.....	Sep. 1913	60	6,680.0	30,048	11.0
Glencoe.....	Aug. 1920	60	576.5	2,139	12.2
Goderich.....	Feb. 1914	60	4,704.0	20,606	14.3
Grand Bend.....	July 1954	60	511.8	2,672	20.1
Grand Valley.....	Dec. 1916	60	488.6	1,543	10.1
Granton.....	July 1916	60	111.3	391	2.3
Gravenhurst.....	Nov. 1915	60	2,519.0	11,802	3.5
Grimsby.....	Jan. 1930	60	2,759.5	12,248	7.5
Guelph.....	Dec. 1910	60	29,917.5	135,036	7.8
Hagersville.....	Sep. 1913	60	1,924.2	6,629	2.3
Hamilton.....	Feb. 1911	25 & 60	294,041.0	1,521,389	0.9
Hanover.....	Sep. 1916	60	3,529.5	13,818	8.3
Harriston.....	July 1916	60	1,203.5	5,359	6.8
Harrow.....	Feb. 1919	60	1,324.2	5,302	10.2
Hastings.....	June 1931	60	448.7	1,686	3.9
Havelock.....	Feb. 1921	60	526.2	1,905	9.2
Hawkesbury.....	June 1952	60	2,745.9	12,237	6.2
Hensall.....	Jan. 1917	60	717.4	3,139	10.6
†Hepworth.....	Apr. 1930	60	119.3	451	11.5
Hespeler.....	Feb. 1911	60	4,868.0	20,918	11.6

† Local system

TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Highgate.....	Dec. 1916	60	234.9	573	0.1
Holstein.....	May 1916	60	110.9	382	10.2
Huntsville.....	Sep. 1916	60	2,477.4	12,914	6.1
Ingersoll.....	May 1911	60	5,237.2	22,180	3.0
Iroquois.....	Feb. 1940	60	812.6	3,280	2.4
Jarvis.....	Feb. 1924	60	372.2	1,430	9.2
Kemptville.....	Dec. 1921	60	1,442.2	6,122	11.1
Kincardine.....	Mar. 1921	60	1,917.2	9,180	7.6
Kingston.....	Dec. 1917	60	39,655.9	188,753	7.1
Kingsville.....	Feb. 1919	60	2,138.0	7,810	13.0
Kirkfield.....	June 1920	60	86.1	295	10.8
Kitchener.....	Jan. 1911	60	60,896.0	292,448	7.7
Lakefield.....	Aug. 1920	60	1,249.0	4,987	9.4
Lambeth.....	Apr. 1915	60	934.9	3,136	5.2
Lanark.....	Sep. 1921	60	308.3	1,207	3.3
Lancaster.....	May 1921	60	265.5	1,050	13.9
La Salle.....	Nov. 1925	60	1,168.4	5,100	7.5
Leamington.....	Feb. 1919	60	5,738.6	26,300	13.5
Lindsay.....	Mar. 1916	60	7,714.4	37,214	4.1
Listowel.....	June 1916	60	2,930.0	12,161	6.8
London.....	Jan. 1911	60	65,096.3	349,340	5.1
London Twp.....	Sep. 1917	60	1,826.5	6,222	5.0
Long Branch.....	Jan. 1931	60	7,188.9	30,967	4.9
L'Orignal.....	June 1952	60	299.8	1,242	14.7
Lucan.....	Feb. 1915	60	592.4	2,249	6.2
Lucknow.....	Jan. 1921	60	653.4	2,539	13.7
Lynden.....	Nov. 1915	60	310.8	1,070	11.0
Madoc.....	Mar. 1916	60	888.0	3,521	8.0
Magnetawan.....	July 1951	60	76.8	295	3.8
Markdale.....	Mar. 1916	60	665.4	2,432	5.5
Markham.....	Apr. 1920	60	2,783.0	9,713	18.5
Marmora.....	Jan. 1921	60	775.0	3,071	12.2
Martintown.....	May 1921	60	156.2	517	8.1
Maxville.....	Feb. 1921	60	450.7	1,553	10.4
Meaford.....	Jan. 1924	60	2,427.0	11,334	10.5
Merlin.....	Dec. 1922	60	309.0	1,091	6.6
Merrickville.....	July 1950	60	417.8	1,795	4.0
Merritton.....	Nov. 1920	60	16,866.6	86,423	0.5
Midland.....	July 1911	60	6,974.9	32,131	16.4
Mildmay.....	Apr. 1930	60	549.0	1,790	8.6
Millbrook.....	Mar. 1916	60	416.0	1,626	8.7
Milton.....	Apr. 1913	60	4,271.0	19,233	8.2
Milverton.....	June 1916	60	817.0	2,981	2.9
Mimico.....	May 1912	60	8,292.4	38,604	6.8
Mitchell.....	Sep. 1911	60	1,686.8	7,628	11.3

## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Fre-quency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Moorefield.....	Mar. 1918	60	189.8	693	4.1
Morrisburg.....	June 1938	60	1,375.1	5,687	0.3
Mount Brydges.....	Mar. 1915	60	331.1	1,304	12.6
Mount Forest.....	Dec. 1915	60	1,782.0	6,739	7.3
Napanee.....	Mar. 1916	60	3,300.9	14,897	4.2
Neustadt.....	Dec. 1918	60	258.4	914	0.1
Newboro.....	Dec. 1948	60	90.5	330	13.2
Newburgh.....	Mar. 1916	60	245.0	968	14.4
Newbury.....	Mar. 1921	60	102.3	399	10.8
Newcastle.....	Mar. 1916	60	826.4	3,483	4.5
New Hamburg.....	Mar. 1911	60	1,223.8	5,319	5.8
Newmarket.....	Dec. 1920	60	5,769.4	25,840	10.8
New Toronto.....	Feb. 1914	60	27,338.3	127,023	38.8
Niagara.....	Aug. 1919	60	1,775.5	8,515	0.1
Niagara Falls.....	Dec. 1915	60	16,971.4	83,601	0.6
North York Twp.....	Nov. 1923	60	152,627.8	663,496	12.6
Norwich.....	May 1912	60	1,123.0	4,068	3.0
Norwood.....	Feb. 1921	60	565.2	2,233	7.6
Oakville.....	Jan. 1930	60	9,745.3	41,736	2.4
Oil Springs.....	Feb. 1918	60	258.1	1,188	3.1
Omeme.....	Jan. 1918	60	437.6	1,608	2.9
Orangeville.....	July 1916	60	3,194.1	12,012	9.6
Orillia.....	Jan. 1954	60	3,712.6	15,331	20.9
Orono.....	Mar. 1916	60	461.9	1,687	10.1
Oshawa.....	Mar. 1916	60	60,367.6	289,755	9.1
Ottawa.....	Jan. 1914	60	162,325.4	663,041	11.1
Otterville.....	Feb. 1916	60	380.0	1,456	7.3
Owen Sound.....	Dec. 1915	60	11,186.9	51,332	1.4
Paisley.....	Sep. 1923	60	446.3	1,735	1.4
Palmerston.....	July 1916	60	1,212.6	5,005	3.7
Paris.....	Feb. 1914	60	3,256.8	14,675	1.9
Parkhill.....	May 1920	60	746.3	2,904	9.2
Parry Sound.....	Aug. 1946	60	1,673.6	9,064	42.3
Penetanguishene.....	July 1911	60	2,400.5	11,777	15.0
Perth.....	Feb. 1919	60	3,546.5	15,165	8.0
Peterborough.....	Mar. 1913	60	37,792.6	190,345	7.3
Petrolia.....	May 1916	60	1,537.6	7,147	4.3
Pickering.....	July 1958	60	857.5	1,777	...
Picton.....	Apr. 1919	60	3,726.5	16,379	7.9
Plattsville.....	Dec. 1914	60	649.2	2,456	31.3
Point Edward.....	Nov. 1916	60	3,997.3	12,836	4.2
Port Burwell.....	Aug. 1955	60	218.4	872	6.8
†Port Carling.....	Apr. 1929	60	317.0	2,038	23.4
Port Colborne.....	Mar. 1920	60	6,497.6	27,008	2.5
Port Credit.....	Aug. 1912	60	9,754.0	61,192	62.6

† Local system



TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Port Dalhousie.....	Nov. 1912	60	1,580.6	8,369	3.7
Port Dover.....	Dec. 1921	60	1,854.0	8,729	6.2
Port Elgin.....	Apr. 1930	60	1,038.6	5,071	6.2
Port Hope.....	Mar. 1916	60	7,348.1	36,765	4.9
Port McNicoll.....	Jan. 1915	60	1,358.0	3,113	11.3
Port Perry.....	Sep. 1922	60	1,234.4	4,999	11.3
Port Rowan.....	Nov. 1926	60	256.7	1,032	9.1
Port Stanley.....	Apr. 1912	60	1,008.9	5,089	4.5
Prescott.....	Dec. 1913	60	3,460.1	14,852	10.3
Preston.....	Jan. 1911	60	8,639.0	38,089	7.9
Priceville.....	Mar. 1921	60	48.8	158	4.7
Princeton.....	Jan. 1915	60	247.2	946	9.8
Queenston.....	Mar. 1921	60	300.2	1,472	3.4
Renfrew.....	Dec. 1944	60	3,338.3	12,320	5.6
Richmond.....	Aug. 1928	60	508.0	1,819	23.0
Richmond Hill.....	June 1925	60	8,611.1	32,376	25.0
Ridgetown.....	Dec. 1915	60	1,255.0	5,026	5.5
Ripley.....	Jan. 1921	60	279.0	1,092	2.5
Riverside.....	Nov. 1922	60	6,128.5	23,022	2.9
Rockland.....	Apr. 1954	60	961.7	3,380	14.0
Rockwood.....	Sep. 1913	60	432.4	1,639	7.8
Rodney.....	Feb. 1917	60	467.4	1,744	4.4
Rosseau.....	July 1931	60	74.3	314	7.3
Russell.....	Feb. 1926	60	300.1	1,061	14.1
St. Catharines.....	Apr. 1914	60	42,009.3	203,551	3.0
St. Clair Beach.....	Nov. 1922	60	607.8	2,268	3.4
St. George.....	Sep. 1915	60	455.6	1,787	5.3
St. Jacobs.....	Sep. 1917	60	445.0	1,677	2.6
St. Mary's.....	May 1911	60	10,120.0	51,544	*280.2
St. Thomas.....	Apr. 1911	60	14,627.2	70,370	5.1
Sandwich East Twp....	Oct. 1956	60	5,945.3	25,435	1.2
Sandwich West Twp....	Mar. 1956	60	9,605.3	38,511	13.2
Sarnia.....	Dec. 1916	60	54,213.3	280,087	27.5
Scarborough Twp.....	Aug. 1918	60	126,244.0	531,515	13.0
Seaforth.....	Nov. 1911	60	1,631.0	6,687	6.7
Shelburne.....	July 1916	60	827.8	3,202	1.0
Simcoe.....	Apr. 1915	60	7,824.0	33,552	25.5
Smith's Falls.....	Sep. 1918	60	6,942.6	29,346	4.7
Smithville.....	Jan. 1930	60	532.0	1,880	1.2
Southampton.....	Apr. 1930	60	927.8	4,936	8.7
Springfield.....	Aug. 1917	60	237.6	864	6.7
Stamford Twp.....	Nov. 1916	60	17,204.6	72,399	6.0
Stayner.....	Oct. 1913	60	952.8	4,015	12.5
Stirling.....	Mar. 1916	60	872.4	3,288	6.0
Stoney Creek.....	Jan. 1930	60	3,556.5	15,428	11.8

\* An industrial customer formerly served by the Commission was taken over by the municipality in the month of May 1958.

## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Frequency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Stouffville.....	Sep. 1923	60	1,871.0	6,900	10.8
Stratford.....	Jan. 1911	60	14,666.1	72,162	2.7
Strathroy.....	Dec. 1914	60	3,416.3	15,789	8.5
Streetsville.....	Dec. 1934	60	2,976.8	11,553	12.6
Sunderland.....	Nov. 1914	60	400.0	1,454	16.0
Sundridge.....	June 1952	60	298.3	1,195	11.5
Sutton.....	Aug. 1923	60	890.5	4,418	13.6
Swansea.....	Oct. 1937	60	5,830.1	29,103	3.6
Tara.....	Feb. 1918	60	341.2	1,268	28.2
Tavistock.....	Nov. 1916	60	801.0	3,458	3.4
Tecumseh.....	Nov. 1922	60	1,308.0	5,413	6.2
Teeswater.....	Dec. 1920	60	585.2	2,507	16.1
Thamesford.....	Feb. 1914	60	579.0	2,198	13.9
Thamesville.....	Oct. 1915	60	629.3	2,374	7.1
Thedford.....	May 1922	60	388.6	1,600	9.7
Thornbury.....	Sep. 1944	60	563.2	2,309	6.6
Thorndale.....	Mar. 1914	60	232.0	799	4.5
Thornton.....	Nov. 1918	60	138.6	425	9.9
Thorold.....	Jan. 1921	60	10,378.9	60,381	2.3
Tilbury.....	Apr. 1915	60	1,139.0	4,765	12.7
Tillsonburg.....	Aug. 1911	60	5,161.6	19,286	6.9
Toronto.....	June 1911	25 & 60	569,099.0	3,144,648	3.0
Toronto Twp.....	Aug. 1913	60	50,322.6	288,512	16.8
Tottenham.....	Oct. 1918	60	418.9	1,574	8.2
Trafalgar Twp.....	Dec. 1923	60	17,890.9	57,674	62.7
Trenton.....	Mar. 1916	60	15,313.6	81,181	4.8
Tweed.....	Mar. 1916	60	1,009.6	4,123	8.5
Uxbridge.....	Sep. 1922	60	1,463.8	6,238	10.5
Vankleek Hill.....	June 1952	60	616.6	1,996	11.3
Victoria Harbour.....	July 1914	60	298.6	1,218	11.3
Walkerton.....	Apr. 1930	60	2,504.6	9,487	1.4
Wallaceburg.....	Feb. 1915	60	7,939.1	42,161	8.4
Wardsville.....	June 1921	60	176.9	619	21.4
Warkworth.....	Oct. 1923	60	219.6	857	7.5
Wasaga Beach.....	Jan. 1953	60	231.0	2,181	6.0
Waterdown.....	Nov. 1911	60	1,152.2	4,346	4.8
Waterford.....	Apr. 1915	60	1,021.4	3,688	9.7
Waterloo.....	Dec. 1910	60	14,340.5	68,183	5.1
Watford.....	Sep. 1917	60	1,095.2	4,112	14.0
Waubushene.....	Dec. 1914	60	273.4	1,184	11.6
Welland.....	Sep. 1917	60	13,180.5	61,366	4.3
Wellesley.....	Nov. 1916	60	148.5	1,417	5.5
Wellington.....	Apr. 1919	60	553.3	2,279	1.6
West Lorne.....	Jan. 1917	60	891.6	3,650	6.9
Weston.....	Aug. 1911	60	9,123.1	41,475	4.1

TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
SOUTHERN ONTARIO SYSTEM—Concluded		cycles	kw	'000 kwh	per cent
Westport.....	Nov. 1931	60	379.2	1,411	12.5
Wheatley.....	Feb. 1924	60	771.3	3,127	10.3
Whitby.....	Mar. 1916	60	10,886.7	46,019	15.1
Warton.....	Apr. 1930	60	1,254.8	5,322	9.5
Williamsburg.....	Apr. 1915	60	226.8	873	7.0
Winchester.....	Jan. 1914	60	1,005.8	4,650	8.7
Windermere.....	June 1930	60	48.4	451	7.0
Windsor.....	Oct. 1914	60	78,946.4	364,853	3.3
Wingham.....	Dec. 1920	60	1,879.6	9,190	8.7
Woodbridge.....	Dec. 1914	60	1,843.9	9,225	8.5
Woodstock.....	Jan. 1911	60	16,797.5	84,450	6.0
Woodville.....	Nov. 1914	60	210.1	758	8.0
Wyoming.....	Nov. 1916	60	381.8	1,318	4.8
York Twp.....	Jan. 1913	60	63,130.0	313,651	5.3
Zurich.....	Sep. 1917	60	378.8	1,322	5.2
NORTHERN ONTARIO PROPERTIES					
Atikokan Twp.....	Dec. 1944	60	3,442.4	17,367	19.5
†Beardmore.....	June 1937	60	420.6	1,802	13.8
†Blind River.....	Nov. 1954	60	1,925.6	8,774	15.7
Cache Bay.....	Dec. 1950	60	247.2	965	27.5
Capreol.....	May 1935	60	1,612.5	7,109	6.9
Chapleau Twp.....	Aug. 1955	60	405.9	986	47.8
†Cobalt.....	Jan. 1945	60	1,054.0	4,398	2.6
Cochrane.....	Dec. 1952	60	2,507.5	12,640	10.9
Coniston.....	Sep. 1956	60	901.5	3,614	6.8
Dryden.....	Feb. 1954	60	2,501.0	13,097	12.3
†Elk Lake Townsite.....	Jan. 1945	60	353.2	1,149	13.8
†Englehart.....	Jan. 1945	60	977.7	3,869	12.9
Fort William.....	Oct. 1926	60	36,295.0	194,264	4.8
†Geraldton.....	Feb. 1937	60	1,385.3	6,042	11.9
†Gogama.....	Aug. 1956	60	226.1	653	43.2
†Haileybury.....	Jan. 1945	60	1,596.9	6,715	11.8
Hearst.....	Apr. 1952	60	1,125.7	5,087	23.9
†Hornepayne.....	Feb. 1955	60	550.8	2,914	10.3
†Hudson Townsite.....	Oct. 1939	60	197.7	747	15.3
†Ignace.....	Dec. 1954	60	145.1	947	11.9
†Jellicoe Townsite.....	Dec. 1951	60	51.7	248	27.4
Kapuskasing.....	Aug. 1953	60	3,770.6	15,699	12.5
†Kearns Townsite.....	Dec. 1938	60	299.5	1,052	9.2
†King Kirkland Townsite	Dec. 1936	60	226.0	497	50.3
†Kirkland Lake	Jan. 1945	60	6,980.8	34,500	18.3

† Local system



**POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES  
TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS**

Municipality	Date of first delivery	Fre- quency December 1958	Peak load December 1958	Energy supplied during 1958	Increase or decrease in energy consumption 1958 over 1957
NORTHERN ONTARIO PROPERTIES—Concluded		cycles	kw	'000 kwh	per cent
Larder Lake Twp.....	Mar. 1949	60	857.0	3,584	9.5
Latchford.....	Apr. 1950	60	183.9	527	21.8
Massey.....	Dec. 1952	60	412.0	1,526	30.8
†Matachewan Twp.....	Apr. 1935	60	255.8	1,132	0.2
†Matheson.....	Dec. 1935	60	576.0	2,496	7.5
†Mattawa.....	Jan. 1953	60	1,305.1	5,913	10.1
McGarry.....	Mar. 1949	60	975.0	3,886	7.0
†New Liskeard.....	Jan. 1945	60	3,260.2	15,160	8.7
Nipigon Twp.....	Jan. 1925	60	1,637.2	7,552	26.2
North Bay.....	Mar. 1916	60	15,240.0	70,226	9.5
†Pickle Lake Landing Townsite.....	Aug. 1952	60	92.2	364	7.3
Port Arthur.....	Dec. 1910	60	41,399.3	186,122	5.7
†Powassan.....	Mar. 1916	60	578.6	2,173	11.2
Rainy River.....	Jan. 1958	60	502.6	1,256	....
†Red Lake Townsite.....	June 1938	60	1,312.5	5,420	11.7
Red Rock.....	Feb. 1948	60	849.3	3,899	10.9
Schreiber Twp.....	Nov. 1948	60	1,198.6	5,302	13.5
Sioux Lookout.....	Sep. 1939	60	1,559.1	8,022	5.4
†South Porcupine Townsite.....	Jan. 1945	60	2,415.0	9,102	9.5
Sturgeon Falls.....	Apr. 1951	60	2,323.8	9,450	16.9
Sudbury.....	Feb. 1930	60	27,484.5	135,030	4.7
Terrace Bay.....	Jan. 1948	60	1,337.7	6,939	5.4
Thessalon.....	May 1956	60	672.6	2,995	12.3
†Thornloe.....	Jan. 1945	60	37.7	179	16.7
†Timmins.....	Jan. 1945	60	14,846.1	60,805	16.8
Webbwood.....	Dec. 1952	60	160.4	582	29.2
West Ferris Twp.....	Apr. 1954	60	3,008.8	12,653	19.2
†White River.....	Apr. 1958	60	343.8	799	....

† Local system

# APPENDIX II—FINANCIAL

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## SOUTHERN ONTARIO

## FIXED

## Statement Showing Changes During

Property	In		
	Balance January 1, 1958	Changes	
		Placed in service	Equipment relocated and reclassified
	\$	\$	\$
<b>Power System</b>			
<b>HYDRO-ELECTRIC GENERATING STATIONS</b>			
Niagara River			
Sir Adam Beck-Niagara No. 1.....	83,864,139	28,706	1,426
Sir Adam Beck-Niagara No. 2.....	281,910,520	29,604,134	17,086
Ontario Power.....	21,804,219	103,423	.....
Toronto Power.....	11,452,957	41,928	.....
Welland Canal			
DeCew Falls.....	27,558,723	206,071	350
St. Lawrence River			
St. Lawrence Power Project (see note).....	.....	133,015,867	1,783,441
Ottawa River			
Des Joachims.....	73,200,089	2,778	.....
Otto Holden.....	57,718,694	177,964	88,816
Chenau.....	29,294,601	58,694	.....
Chats Falls.....	9,168,905	100,819	.....
Ogoki Diversion.....	5,044,689	6,705	.....
Madawaska River			
Stewartville.....	12,418,527	939	35,542
Barrett Chute.....	4,897,493	15,197	.....
Other properties.....	21,194,816	757,552	334,644
	639,528,372	164,120,777	1,978,417
<b>THERMAL-ELECTRIC GENERATING STATIONS</b>			
J. Clark Keith—Windsor.....	46,270,370	84,221	100,000
Richard L. Hearn—Toronto.....	47,769,026	6,958	100,000
Lakeview—Toronto.....	.....	.....	.....
Other properties.....	332,621	86,054	2,872
	94,372,017	177,233	197,128
Total generating stations.....	733,900,389	164,298,010	1,781,289
<b>TRANSFORMER STATIONS</b>			
230-kv.....	75,907,732	4,004,047	4,101,480
Other—Niagara Division.....	97,453,432	9,670,145	1,796,374
—Georgian Bay Division.....	7,672,089	124,444	40,910
—Eastern Ontario Division.....	21,286,661	1,611,842	208,130
Total transformer stations.....	202,319,914	15,410,478	2,056,066
<b>TRANSMISSION LINES</b>			
230-kv.....	83,848,914	10,106,984	.....
Other—Niagara Division.....	60,014,743	2,006,358	29,371
—Georgian Bay Division.....	7,998,044	410,428	72,216
—Eastern Ontario Division.....	24,845,354	1,272,835	83,288
Total transmission lines.....	176,707,055	13,796,605	40,443

NOTE: The cost of the St. Lawrence Power Project under construction at December 31, 1958,



## SYSTEM

## ASSETS

Year 1958 and Balances at December 31, 1958

service				
during year				
Sales and retirements	Balance December 31, 1958	Under construction December 31, 1958	Total fixed assets December 31, 1958	Expenditure during 1958
\$	\$	\$	\$	\$
15,381	83,876,038	185,126	84,061,164	30,919
58,646	311,473,094	697,237	312,170,331	7,560,349
18,250	21,889,392	.....	21,889,392	101,752
11,456	11,483,429	35,711	11,519,140	37,495
322,844	27,441,600	1,148	27,442,748	56,688
.....	131,232,426	128,461,891	259,694,317	50,812,534
17,503	73,185,364	54,508	73,239,872	42,228
3,377	57,982,097	6,977	57,989,074	131,784
.....	29,353,295	6,327	29,359,622	48,385
5,131	9,264,593	16,381	9,280,974	114,773
.....	5,051,394	.....	5,051,394	6,705
4,183	12,450,825	.....	12,450,825	4,185
28,294	4,884,396	1,296	4,885,692	1,015
18,058	21,599,666	128,551	21,728,217	824,780
503,123	801,167,609	129,595,153	930,762,762	59,763,192
275	46,454,316	1,265	46,455,581	29,363
2,350	47,873,634	42,912,833	90,786,467	28,487,198
.....	.....	6,528,501	6,528,501	6,268,422
.....	415,803	299,051	714,854	230,349
2,625	94,743,753	49,741,650	144,485,403	35,015,332
505,748	895,911,362	179,336,803	1,075,248,165	94,778,524
120,362	83,892,897	2,431,848	86,324,745	5,169,743
3,011,754	102,315,449	1,769,277	104,084,726	8,377,190
278,273	7,477,350	27,452	7,504,802	120,767
672,745	22,017,628	775,339	22,792,967	1,936,022
4,083,134	215,703,324	5,003,916	220,707,240	15,603,722
220,932	93,734,966	2,853,836	96,588,802	10,410,187
745,047	61,305,425	2,581,465	63,886,890	3,209,975
228,957	8,107,299	289,044	8,396,343	332,886
298,659	25,902,818	575,941	26,478,759	1,368,485
1,493,595	189,050,508	6,300,286	195,350,794	15,321,533

\$128,461,891, includes generation, transformation, transmission, and rural distribution facilities.

SOUTHERN ONTARIO

FIXED

Statement Showing Changes During

Property	In		
	Balance January 1, 1958	Changes	
		Placed in service	Equipment relocated and reclassified
	\$	\$	\$
<b>Power System—(continued)</b>			
LOCAL SYSTEMS			
Georgian Bay Division.....	248,115	135,930	8,381
COMMUNICATIONS.....	12,116,908	184,586	256,506
Total power system.....	1,125,292,381	193,825,609	67,095
<b>Administrative and Service Buildings and Equipment</b>			
BUILDINGS.....	20,855,769	1,553,715	26,750
OFFICE AND SERVICE EQUIPMENT.....	5,596,857	1,102,796	.....
Total administrative and service buildings and equipment.....	26,452,626	2,656,511	26,750
<b>Rural Power District.....</b>	190,033,414	16,402,130	40,345
Total fixed assets.....	1,341,778,421	212,884,250	.....

Changes in Assets under Construction During 1958

Under construction at January 1, 1958.....	\$ 261,194,231
Expenditures during 1958.....	144,348,947
	\$ 405,543,178
Less—Placed in service during 1958.....	212,884,250
Under construction at December 31, 1958.....	\$ 192,658,928

**SYSTEM****ASSETS****Year 1958 and Balances at December 31, 1958**

service		Under construction December 31, 1958	Total fixed assets December 31, 1958	Expenditure during 1958
during year	Balance December 31, 1958			
Sales and retirements				
\$	\$	\$	\$	\$
26,309	366,117	4,122	370,239	101,744
608,354	11,436,634	383,729	11,820,363	403,821
6,717,140	1,312,467,945	191,028,856	1,503,496,801	126,209,344
49,003 255,403	22,333,731 6,444,250	196,515 .....	22,530,246 6,444,250	828,981 1,102,796
304,406	28,777,981	196,515	28,974,496	1,931,777
5,156,164	201,239,035	1,433,557	202,672,592	16,207,826
12,177,710	1,542,484,961	192,658,928	1,735,143,889	144,348,947

**Summary of Sales and Retirements During 1958**

Charged to operations.....	\$ 57,976
Charged to frequency standardization.....	77,646
Charged to reserve for stabilization of rates and contingencies.....	266,718
Charged to accumulated depreciation.....	6,657,116
Proceeds from sales.....	5,118,254
	<u>\$ 12,177,710</u>



SOUTHERN ONTARIO

ACCUMULATED DEPRECIATION

December 31, 1958

	Power System	Rural Power District	Administrative and service buildings and equipment	Total
	\$	\$	\$	\$
Balances at January 1, 1958..	130,058,494	36,017,720	5,101,740	171,177,954
Add:				
Interest at 3% per annum on accumulated deprecia- tion required on plant not fully depreciated.....	3,297,340	1,152,954	53,044	4,503,338
Provision in the year				
—direct (see note).....	10,667,517	7,607,127	.....	18,274,644
—indirect.....	3,346	.....	789,453	792,799
Salvage recoveries less re- moval costs of assets re- tired.....	391,314	437,946	10,895	57,527
Adjustments re transfer of equipment.....	30,088	30,109	21	.....
Other adjustments.....	47,599	41,633	42,279	48,245
	143,652,894	45,204,223	5,997,390	194,854,507
Deduct:				
Cost of fixed assets retired less proceeds from sales...	3,515,813	3,079,085	62,218	6,657,116
Balances at December 31, 1958	140,137,081	42,125,138	5,935,172	188,197,391

NOTE—The provision for the year includes a special appropriation of \$2,100,000 required to reflect, as at January 1, 1958, a reduction in the life expectancy of Rural Power District distribution and other facilities indicated by a study of retirement experience completed during the year. The regular provision for 1958 is based on revised rates determined from this study.

**SYSTEM****FREQUENCY STANDARDIZATION ACCOUNT****December 31, 1958**

Balance at debit at January 1, 1958.....	\$ 180,197,985	
Expenditures for frequency standardization work completed during		
year.....	\$ 20,605,325	
Less industrial customers' contributions.....	1,621,390	
	<u>\$ 18,983,935</u>	
Less portion of cost charged to cost of power for the year.....	7,220,345	11,763,590
		<u>11,763,590</u>
Balance at debit at December 31, 1958.....	\$ 191,961,575	

**SOUTHERN ONTARIO**  
**STATEMENTS OF RESERVES,**  
**Stabilization of Rates**

	Power System		
	General	Stream-flow variation	Maximum power cost
	\$	\$	\$
Balances at January 1, 1958.....	91,004,366	12,700,000	461,032
Add:			
Interest for year on reserve balances (Note) .	3,329,243	466,608	18,441
Provision in the year.....		5,363,660	
Excess of revenue over costs of supplying power to Rural Power District customers.....			
Profit on redemption of funded debt and sale of investments, net.....	376,671		
	94,710,280	18,530,268	479,473
Deduct:			
Expenditures during year.....			
Withdrawal in year applied in reduction of cost of power.....			18,441
Write-off of certain fixed assets in a rural operating area to reflect a physical inventory taken during the year.....			
Balances at December 31, 1958.....	94,710,280	18,530,268	461,032

NOTE: Interest for the year on the general, stream-flow variation, and nuclear research reserve balances was credited at 3.57% for the period January to August and 3.91% for the period September to December, 1958, which approximated the actual earnings on the investments held for these reserves. Interest on the other reserve balances was at 4%.

**Exchange Discount and Premium on Funded Debt**

	Discount	Premium
	\$	\$
Exchange discount and premium on funded debt issued in United States funds:		
Balances at January 1, 1958.....	4,067,570	4,803,858
Less discount and premium on bonds redeemed during 1958 .	207,694	57,557
Balances at December 31, 1958.....	3,859,876	4,746,301



## SYSTEM

DECEMBER 31, 1958

## and Contingencies

Rural Power District		Sub-total	Nuclear research	Total
General	Rates suspense			
\$ 1,567,050	\$ 126,117	\$ 105,858,565	\$ 2,691,342	\$ 108,549,907
57,328	5,045	3,876,665	150,375	4,027,040
.....	.....	5,363,660	2,436,293	7,799,953
.....	267,289	267,289	.....	267,289
.....	.....	376,671	.....	376,671
1,624,378	398,451	115,742,850	5,278,010	121,020,860
.....	.....	.....	612,243	612,243
.....	.....	18,441	.....	18,441
266,718	.....	266,718	.....	266,718
1,357,660	398,451	115,457,691	4,665,767	120,123,458

## Sinking Fund

	Power System and Rural Power District	Administrative and service buildings and equipment	Total
Balances at January 1, 1958.....	\$ 231,612,556	\$ 2,984,349	\$ 234,596,905
Add:			
Interest at 4% per annum on reserve balances	9,264,502	119,374	9,383,876
Provision in the year—direct.....	13,726,613	.....	13,726,613
—indirect.....	2,047	224,306	226,353
	254,605,718	3,328,029	257,933,747
Deduct credits resulting from matured sinking funds (see note):			
Interest.....	315,604	32,087	347,691
Principal.....	83,082	8,447	91,529
	398,686	40,534	439,220
Balances at December 31, 1958.....	254,207,032	3,287,495	257,494,527

NOTE: The matured sinking funds at January 1, 1958 amounted to \$8,692,243.

## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Acton.....	3,207.4	15,095.9	117,824.89	16,037.00	6,784.65
Ailsa Craig.....	241.9	973.8	9,254.20	1,209.50	502.01
Ajax.....	4,672.4	24,719.0	147,572.98	.....	10,044.05
Alexandria.....	1,370.9	6,350.2	49,943.58	.....	2,893.88
Alfred.....	279.1	1,059.2	10,335.41	.....	575.42
Alliston.....	1,380.9	7,934.4	55,072.74	.....	3,005.45
Almonte.....	1,165.7	4,939.3	38,225.46	.....	2,433.63
Alvinston.....	217.4	828.4	8,329.64	1,087.00	448.41
Amherstburg.....	2,818.8	15,624.8	107,149.69	14,094.00	6,101.34
Ancaster Twp.....	1,782.9	8,820.0	59,102.80	8,914.50	3,796.60
Apple Hill.....	80.4	350.4	2,813.78	.....	168.42
Arkona.....	234.3	1,093.8	8,913.83	1,171.50	495.09
Arnprior.....	3,561.1	16,767.1	118,929.18	.....	7,533.21
Arthur.....	595.7	2,642.4	22,137.99	.....	1,250.60
Athens.....	311.1	1,512.8	10,891.83	.....	660.93
Aurora.....	3,001.6	16,517.5	103,530.28	15,008.00	6,489.93
Aylmer.....	3,353.9	16,822.0	107,281.18	16,769.50	7,155.52
Ayr.....	584.5	2,394.0	21,160.27	2,922.50	1,215.39
Baden.....	722.2	2,834.9	21,756.29	3,611.00	1,494.49
Bancroft.....	1,150.4	4,852.8	50,709.16	.....	2,400.41
Barrie.....	12,965.4	72,261.0	410,450.46	.....	28,086.96
Barry's Bay.....	246.9	1,176.2	10,478.02	.....	523.10
Bath.....	255.1	1,141.4	8,928.72	.....	536.13
Beachville.....	2,138.5	14,687.7	75,629.49	10,692.50	4,795.53
Beamsville.....	1,290.4	6,576.0	43,350.53	6,452.00	2,759.19
Beaverton.....	905.2	4,171.5	36,551.44	.....	1,909.55
Beeton.....	363.7	1,648.8	14,930.35	.....	765.64
Belle River.....	555.2	2,653.6	21,099.27	2,776.00	1,176.81
Belleville.....	14,893.5	81,413.1	451,061.43	.....	32,170.05
Blenheim.....	1,160.1	5,473.4	41,341.15	5,800.50	2,454.76
Bloomfield.....	356.8	1,594.9	11,612.87	.....	749.77
Blyth.....	522.8	2,448.4	19,916.86	2,614.00	1,105.16
Bobcaygeon.....	578.8	2,740.0	20,910.85	.....	1,225.27
Bolton.....	741.0	3,655.7	28,396.13	3,705.00	1,577.34
Bothwell.....	312.5	1,260.8	12,385.02	1,562.50	648.68
Bowmanville.....	5,230.0	25,022.0	161,195.30	.....	11,086.99
Bracebridge.....	31.7	30.0	1,420.48	.....	60.05
Bradford.....	1,297.2	6,784.8	47,128.21	.....	2,783.95
Braeside.....	379.2	1,238.8	11,641.10	.....	770.01
Brampton.....	8,796.6	41,587.0	262,805.72	43,983.00	18,618.43

## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
1,445.11	139,201.43	142,727.45	3,526.02	44.50	43.40
108.99	10,856.72	11,188.64	331.92	46.25	44.88
2,105.18	155,511.85	169,374.20	13,862.35	36.25	33.28
617.67	52,219.79	55,863.84	3,644.05	40.75	38.09
125.75	10,785.08	11,094.26	309.18	39.75	38.64
622.17	57,456.02	61,794.90	4,338.88	44.75	41.61
525.21	40,133.88	43,132.45	2,998.57	37.00	34.43
97.95	9,767.10	10,109.89	342.79	46.50	44.93
1,270.03	126,075.00	133,891.43	7,816.43	47.50	44.73
803.30	71,010.60	72,652.49	1,641.89	40.75	39.83
36.22	2,945.98	3,134.96	188.98	39.00	36.64
105.57	10,474.85	10,367.03	107.82	44.25	44.71
1,604.48	124,857.91	132,652.52	7,794.61	37.25	35.06
268.40	23,120.19	24,868.40	1,748.21	41.75	38.81
140.17	11,412.59	12,053.51	640.92	38.75	36.68
1,352.39	123,675.82	126,066.15	2,390.33	42.00	41.20
1,511.12	129,695.08	154,277.87	24,582.79	46.00	38.67
263.35	25,034.81	25,716.56	681.75	44.00	42.83
325.39	26,536.39	26,721.68	185.29	37.00	36.74
518.32	52,591.25	58,670.84	6,079.59	51.00	45.72
5,841.64	432,695.78	460,272.30	27,576.52	35.50	33.37
111.24	10,889.88	11,482.40	592.52	46.50	44.11
114.94	9,349.91	10,074.82	724.91	39.50	36.65
963.51	90,154.01	95,162.88	5,008.87	44.50	42.16
581.40	51,980.32	59,036.96	7,056.64	45.75	40.28
407.84	38,053.15	40,734.01	2,680.86	45.00	42.04
163.87	15,532.12	16,640.41	1,108.29	45.75	42.71
250.15	24,801.93	25,676.45	874.52	46.25	44.67
6,710.36	476,521.12	510,103.52	33,582.40	34.25	32.00
522.69	49,073.72	52,204.50	3,130.78	45.00	42.30
160.76	12,201.88	12,755.60	553.72	35.75	34.20
235.55	23,400.47	24,048.42	647.95	46.00	44.76
260.78	21,875.34	22,717.90	842.56	39.25	37.79
333.86	33,344.61	33,900.38	555.77	45.75	45.00
140.80	14,455.40	15,624.58	1,169.18	50.00	46.26
2,356.41	169,925.88	181,743.09	11,817.21	34.75	32.49
14.28	1,466.25	1,046.38	419.87	33.00	46.26
584.46	49,327.70	51,889.66	2,561.96	40.00	38.03
170.85	12,240.26	12,798.28	558.02	33.75	32.28
3,963.36	321,443.79	327,673.97	6,230.18	37.25	36.54



## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Brantford.....	38,819.4	197,063.9	1,173,107.63	194,097.00	82,959.69
Brantford Twp.....	3,903.6	20,366.6	131,386.30	19,518.00	8,374.63
Brechin.....	115.8	473.6	4,689.11	.....	240.75
Bridgeport.....	632.1	2,907.2	21,119.48	3,160.50	1,333.09
Brigden.....	202.9	832.0	7,474.40	1,014.50	421.96
Brighton.....	1,109.9	5,587.7	39,393.01	.....	2,369.19
Brockville.....	13,454.8	68,546.5	398,938.91	.....	28,768.19
Bronte.....	780.2	4,030.4	27,995.35	3,901.00	1,671.45
Brussels.....	513.2	2,273.6	19,750.17	2,566.00	1,077.23
Burford.....	645.6	2,791.9	21,589.54	3,228.00	1,351.13
Burgessville.....	167.0	569.6	5,456.05	835.00	340.53
Burk's Falls.....	337.1	1,642.8	15,029.04	.....	716.38
Burlington.....	9,408.9	46,567.4	300,759.13	47,044.50	20,037.09
Caledonia.....	823.4	4,222.4	27,621.95	4,117.00	1,762.16
Campbellville.....	128.2	580.0	4,595.85	641.00	269.81
Cannington.....	505.1	2,360.0	21,510.14	.....	1,067.42
Cardinal.....	819.1	4,070.2	30,134.23	.....	1,745.30
Carleton Place.....	2,675.5	14,023.7	98,557.75	.....	5,743.71
Casselman.....	511.6	2,105.6	18,625.73	.....	1,064.41
Cayuga.....	334.9	1,523.6	12,020.58	1,674.50	705.32
Chalk River.....	305.4	1,772.3	10,836.26	.....	665.72
Chatham.....	15,152.8	73,145.4	450,774.52	75,764.00	32,160.38
Chatsworth.....	228.6	986.8	8,845.42	.....	478.32
Chesley.....	1,061.0	4,351.9	37,109.77	.....	2,206.59
Chesterville.....	1,024.9	4,997.9	38,747.06	.....	2,178.23
Chippawa.....	859.0	4,529.6	29,801.15	4,295.00	1,845.68
Clifford.....	316.8	1,477.6	11,847.71	1,584.00	669.34
Clinton.....	1,837.5	9,230.5	63,087.98	9,187.50	3,921.13
Cobden.....	493.5	2,145.6	15,471.76	.....	1,033.49
Cobourg.....	7,255.2	37,625.7	260,785.37	.....	15,551.64
Colborne.....	674.8	3,509.6	25,587.34	.....	1,447.03
Coldwater.....	451.8	1,947.0	15,832.15	.....	945.14
Collingwood.....	5,590.1	25,705.5	203,313.52	.....	11,789.22
Comber.....	243.7	968.0	9,278.43	1,218.50	504.98
Cookstown.....	269.9	1,190.4	10,990.34	.....	566.22
Cottam.....	200.3	870.7	6,805.32	1,001.50	419.46
Courtright.....	149.7	649.0	5,357.15	748.50	313.39
Creemore.....	419.8	1,889.6	16,084.26	.....	882.93
Dashwood.....	224.4	853.4	8,866.22	1,122.00	462.74
Deep River.....	1,100.8	5,762.0	35,422.67	.....	2,362.72

## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
17,490.33	1,432,673.99	1,484,843.32	52,169.33	38.25	36.91
1,758.79	157,520.14	160,048.29	2,528.15	41.00	40.35
52.17	4,877.69	4,949.04	71.35	42.75	42.12
284.80	25,328.27	26,233.89	905.62	41.50	40.07
91.42	8,819.44	9,281.17	461.73	45.75	43.47
500.07	41,262.13	44,120.19	2,858.06	39.75	37.18
6,062.15	421,644.95	447,372.10	25,727.15	33.25	31.34
351.52	33,216.28	33,548.96	332.68	43.00	42.57
231.23	23,162.17	24,250.67	1,088.50	47.25	45.13
290.88	25,877.79	27,439.06	1,561.27	42.50	40.08
75.24	6,556.34	6,930.50	374.16	41.50	39.26
151.88	15,593.54	16,936.78	1,343.24	50.25	46.26
4,239.24	363,601.48	397,527.78	33,926.30	42.25	38.64
370.99	33,130.12	33,758.74	628.62	41.00	40.24
57.76	5,448.90	5,577.42	128.52	43.50	42.50
227.58	22,349.98	23,233.45	883.47	46.00	44.25
369.05	31,510.48	32,765.34	1,254.86	40.00	38.47
1,205.46	103,096.00	108,356.41	5,260.41	40.50	38.53
230.50	19,459.64	21,231.05	1,771.41	41.50	38.04
150.89	14,249.51	14,985.29	735.78	44.75	42.55
137.60	11,364.38	11,603.95	239.57	38.00	37.21
6,827.19	551,871.71	572,017.91	20,146.20	37.75	36.42
103.00	9,220.74	9,871.16	650.42	43.18	40.34
478.04	38,838.32	41,379.98	2,541.66	39.00	36.61
461.78	40,463.51	43,558.62	3,095.11	42.50	39.48
387.03	35,554.80	35,220.71	334.09	41.00	41.39
142.74	13,958.31	14,412.87	454.56	45.50	44.06
827.90	75,368.71	78,094.11	2,725.40	42.50	41.02
222.35	16,282.90	17,026.93	744.03	34.50	32.99
3,268.88	273,068.13	291,236.05	18,167.92	40.14	37.64
304.04	26,730.33	28,680.41	1,950.08	42.50	39.61
203.56	16,573.73	18,637.79	2,064.06	41.25	36.68
2,518.66	212,584.08	229,192.07	16,607.99	41.00	38.03
109.80	10,892.11	11,391.42	499.31	46.75	44.69
121.61	11,434.95	12,219.91	784.96	45.28	42.37
90.25	8,136.03	8,363.92	227.89	41.75	40.62
67.45	6,351.59	6,549.37	197.78	43.75	42.43
189.14	16,778.05	17,735.15	957.10	42.25	39.97
101.10	10,349.86	10,603.69	253.83	47.25	46.12
495.97	37,289.42	38,802.03	1,512.61	35.25	33.87

## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Delaware.....	205.3	853.2	7,302.71	1,026.50	427.62
Delhi.....	1,945.0	9,590.4	69,462.30	9,725.00	4,139.93
Deseronto.....	836.9	4,268.8	31,291.25	.....	1,789.70
Dorchester.....	304.7	1,388.8	10,731.48	1,523.50	641.87
Drayton.....	296.7	1,177.1	10,396.80	1,483.50	614.71
Dresden.....	989.6	4,784.7	37,091.22	4,948.00	2,100.78
Drumbo.....	200.9	792.3	7,410.00	1,004.50	415.95
Dublin.....	199.3	859.4	6,728.40	996.50	416.96
Dundalk.....	429.3	1,853.2	17,074.63	.....	898.26
Dundas.....	5,963.8	28,923.1	175,146.20	29,819.00	12,665.53
Dunnville.....	3,099.0	15,292.8	118,313.26	15,495.00	6,596.94
Durham.....	1,338.1	5,701.3	47,991.44	.....	2,795.40
Dutton.....	323.9	1,515.7	12,824.71	1,619.50	684.64
East York Twp.....	33,727.3	175,571.2	1,029,150.07	168,636.50	72,333.84
Eganville.....	395.2	1,889.6	13,551.29	.....	837.71
Elmira.....	3,039.7	13,866.0	103,482.68	15,198.50	6,403.99
Elmvale.....	488.4	2,300.8	17,829.03	.....	1,033.24
Elmwood.....	156.6	522.2	5,767.81	.....	318.62
Elora.....	678.8	3,021.9	26,138.61	3,394.00	1,425.70
Embro.....	314.2	1,402.8	11,132.48	1,571.00	660.16
Erieau.....	337.2	1,549.8	12,914.04	1,686.00	711.09
Erie Beach.....	52.9	171.2	1,884.61	264.50	107.32
Erin.....	450.7	2,050.8	16,609.20	.....	949.22
Essex.....	1,286.1	6,682.9	46,370.62	6,430.50	2,757.55
Etobicoke Twp.....	82,721.9	498,881.6	2,677,764.17	413,609.50	181,426.75
Exeter.....	1,661.7	8,092.8	63,758.12	8,308.50	3,531.00
Fergus.....	3,036.8	12,791.6	104,478.45	15,184.00	6,335.45
Finch.....	211.9	895.2	7,358.78	.....	442.22
Flesherton.....	273.3	1,160.8	9,273.49	.....	570.73
Fonthill.....	976.5	4,897.0	32,741.74	4,882.50	2,083.31
Forest.....	1,066.9	6,223.2	42,173.96	5,334.50	2,327.52
Forest Hill.....	11,710.0	65,040.4	362,541.40	58,550.00	25,354.23
Frankford.....	538.8	2,492.1	17,347.95	.....	1,137.15
Galt.....	20,136.9	89,433.7	573,443.14	100,684.50	42,281.52
Georgetown.....	5,597.2	30,047.5	184,745.31	27,986.00	12,057.71
Glencoe.....	462.4	2,139.0	18,056.95	2,312.00	975.92
Goderich.....	4,036.5	20,605.5	159,749.64	20,182.50	8,633.01
Grand Bend.....	606.6	2,672.0	24,027.03	3,033.00	1,272.38
Grand Valley.....	407.6	1,542.7	16,295.20	.....	840.10
Granton.....	99.4	390.6	3,490.80	497.00	205.72



## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
92.50	8,664.33	8,828.97	164.64	43.00	42.20
876.33	82,450.90	84,606.40	2,155.50	43.50	42.39
377.07	32,703.88	34,729.29	2,025.41	41.50	39.08
137.28	12,759.57	13,558.41	798.84	44.50	41.88
133.68	12,361.33	12,758.10	396.77	43.00	41.66
445.87	43,694.13	45,523.54	1,829.41	46.00	44.15
90.52	8,739.93	9,492.49	752.56	47.25	43.50
89.80	8,052.06	8,271.28	219.22	41.50	40.40
193.42	17,779.47	18,897.80	1,118.33	44.02	41.42
2,687.03	214,943.70	219,170.88	4,227.18	36.75	36.04
1,396.27	139,008.93	144,879.42	5,870.49	46.75	44.86
602.89	50,183.95	54,528.60	4,344.65	40.75	37.50
145.94	14,982.91	16,519.35	1,536.44	51.00	46.26
15,196.05	1,254,924.36	1,290,070.50	35,146.14	38.25	37.21
178.06	14,210.94	14,919.12	708.18	37.75	35.96
1,369.56	123,715.61	129,187.62	5,472.01	42.50	40.70
220.05	18,642.22	19,778.19	1,135.97	40.50	38.17
70.56	6,015.87	6,225.83	209.96	39.75	38.42
305.84	30,652.47	31,053.59	401.12	45.75	45.16
141.56	13,222.08	13,744.79	522.71	43.75	42.08
151.93	15,159.20	16,100.51	941.31	47.75	44.96
23.83	2,232.60	2,366.17	133.57	44.75	42.20
203.07	17,355.35	18,364.66	1,009.31	40.75	38.51
579.46	54,979.21	57,554.85	2,575.64	44.75	42.75
37,270.88	3,235,529.54	3,350,235.61	114,706.07	40.50	39.11
748.69	74,848.93	76,854.79	2,005.86	46.25	45.04
1,368.25	124,629.65	127,545.25	2,915.60	42.00	41.04
95.47	7,705.53	8,423.68	718.15	39.75	36.36
123.14	9,721.08	10,166.03	444.95	37.20	35.57
439.97	39,267.58	41,743.26	2,475.68	42.75	40.21
480.70	49,355.28	54,411.48	5,056.20	51.00	46.26
5,276.02	441,169.61	453,762.83	12,593.22	38.75	37.67
242.76	18,242.34	19,126.53	884.19	35.50	33.86
9,072.81	707,336.35	734,996.87	27,660.52	36.50	35.13
2,521.85	222,267.17	235,082.05	12,814.88	42.00	39.71
208.34	21,136.53	21,964.80	828.27	47.50	45.71
1,818.67	186,746.48	195,771.47	9,024.99	48.50	46.26
273.31	28,059.10	30,936.61	2,877.51	51.00	46.26
183.65	16,951.65	18,138.94	1,187.29	44.50	41.59
44.79	4,148.73	4,201.43	52.70	42.25	41.74

## SOUTHERN ONTARIO

## STATEMENT OF THE ALLOCATION

for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Gravenhurst.....	2,388.1	11,802.2	82,649.88	.....	5,084.66
Grimsby.....	2,308.0	12,248.0	80,535.61	11,540.00	4,963.62
Guelph.....	27,233.8	135,035.8	798,096.74	136,169.00	58,011.36
Hagersville.....	1,711.9	6,628.7	58,279.78	8,559.50	3,537.16
Hamilton.....	251,524.6	1,521,389.1	7,917,943.14	1,257,623.00	551,911.00
Hanover.....	3,285.2	13,817.8	105,100.98	.....	6,852.49
Harriston.....	1,099.9	5,359.1	38,810.07	5,499.50	2,337.35
Harrow.....	1,127.6	5,301.6	41,158.43	5,638.00	2,384.90
Hastings.....	365.0	1,686.4	12,501.93	.....	770.24
Havelock.....	405.2	1,905.2	14,785.52	.....	857.01
Hawkesbury.....	2,292.9	12,236.6	70,386.30	.....	4,935.19
Hensall.....	680.2	3,139.2	24,983.47	3,401.00	1,435.17
Hespeler.....	4,576.4	20,918.3	138,964.31	22,882.00	9,643.98
Hightgate.....	180.0	573.4	6,871.79	900.00	364.65
Holstein.....	90.0	382.0	3,348.93	.....	187.93
Huntsville.....	2,353.2	12,914.0	89,471.71	.....	5,085.90
Ingersoll.....	4,633.8	22,180.4	152,141.64	23,169.00	9,823.75
Iroquois.....	672.1	3,280.3	24,897.68	.....	1,428.58
Jarvis.....	296.3	1,429.6	10,968.91	1,481.50	628.83
Kemptville.....	1,291.8	6,121.9	46,649.38	.....	2,735.03
Kincardine.....	1,730.5	9,180.5	73,475.39	.....	3,721.48
Kingston.....	34,139.3	188,753.3	1,033,786.90	.....	73,866.74
Kingsville.....	1,559.3	7,810.4	50,911.25	7,796.50	3,326.14
Kirkfield.....	71.7	294.8	3,082.44	.....	149.16
Kitchener.....	55,485.3	292,447.7	1,494,885.40	277,426.50	119,210.04
Lakefield.....	1,008.7	4,987.2	32,480.75	.....	2,147.82
Lambeth.....	695.4	3,136.0	24,233.93	3,477.00	1,462.93
Lanark.....	265.2	1,207.4	9,306.31	.....	558.58
Lancaster.....	212.6	1,050.1	7,638.26	.....	452.63
La Salle.....	1,057.3	5,100.2	37,239.86	5,286.50	2,243.81
Leamington.....	4,967.5	26,300.2	172,820.06	24,837.50	10,679.60
Lindsay.....	6,577.9	37,213.5	227,254.80	.....	14,282.22
Listowel.....	2,691.8	12,161.2	89,336.23	13,459.00	5,664.11
London.....	58,923.0	349,339.8	1,829,162.84	294,615.00	128,876.86
London Twp.....	1,404.9	6,222.0	45,521.98	7,024.50	2,948.84
Long Branch.....	5,957.5	30,966.6	192,342.15	29,787.50	12,774.16
L'Orignal.....	262.8	1,241.6	9,758.67	.....	556.18
Lucan.....	484.7	2,248.8	18,920.91	2,423.50	1,023.38
Lucknow.....	575.5	2,539.2	23,396.99	.....	1,207.40
Lynden.....	244.5	1,069.6	8,545.22	1,222.50	512.42

## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
1,075.97	86,658.57	90,746.54	4,087.97	38.00	36.29
1,039.88	95,999.35	106,743.07	10,743.72	46.25	41.59
12,270.36	980,006.74	1,028,076.28	48,069.54	37.75	35.98
771.31	69,605.13	71,042.47	1,437.34	41.50	40.66
113,326.01	9,614,151.13	9,746,576.63	132,425.50	38.75	38.22
1,480.17	110,473.30	116,622.83	6,149.53	35.50	33.63
495.57	46,151.35	47,571.40	1,420.05	43.25	41.96
508.05	48,673.28	49,898.16	1,224.88	44.25	43.17
164.45	13,107.72	15,603.39	2,495.67	42.75	35.91
182.57	15,459.96	17,625.49	2,165.53	43.50	38.15
1,033.08	74,288.41	76,811.62	2,523.21	33.50	32.40
306.47	29,513.17	29,929.91	416.74	44.00	43.39
2,061.93	169,428.36	175,045.39	5,617.03	38.25	37.02
81.10	8,055.34	8,504.24	448.90	47.25	44.75
40.55	3,496.31	3,757.52	261.21	41.75	38.85
1,060.25	93,497.36	96,479.85	2,982.49	41.00	39.73
2,087.79	183,046.60	188,826.00	5,779.40	40.75	39.50
302.82	26,023.44	30,077.97	4,054.53	44.75	38.72
133.50	12,945.74	13,555.37	609.63	45.75	43.69
582.03	48,802.38	52,319.59	3,517.21	40.50	37.78
779.69	76,417.18	81,767.71	5,350.53	47.25	44.16
15,381.68	1,092,271.96	1,160,737.62	68,465.66	34.00	31.99
702.55	61,331.34	63,931.29	2,599.95	41.00	39.33
32.30	3,199.30	3,371.86	172.56	47.00	44.62
24,999.26	1,866,522.68	1,941,985.52	75,462.84	35.00	33.64
454.48	34,174.09	36,314.10	2,140.01	36.00	33.88
313.32	28,860.54	29,208.20	347.66	42.00	41.50
119.49	9,745.40	10,741.28	995.88	40.50	36.75
95.79	7,995.10	8,450.52	455.42	39.75	37.61
476.37	44,293.80	45,464.64	1,170.84	43.00	41.89
2,238.14	206,099.02	213,603.23	7,504.21	43.00	41.49
2,963.71	238,573.31	254,892.02	16,318.71	38.75	36.27
1,212.81	107,246.53	111,035.72	3,789.19	41.25	39.84
26,548.13	2,226,106.57	2,283,264.71	57,158.14	38.75	37.78
632.99	54,862.33	55,843.12	980.79	39.75	39.05
2,684.19	232,219.62	239,788.70	7,569.08	40.25	38.98
118.41	10,196.44	10,314.92	118.48	39.25	38.80
218.38	22,149.41	24,232.49	2,083.08	50.00	45.70
259.30	24,345.09	26,251.59	1,906.50	45.62	42.30
110.16	10,169.98	10,512.08	342.10	43.00	41.60



**SOUTHERN ONTARIO**  
**STATEMENT OF THE ALLOCATION**  
**for the Year**

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Madoc.....	696.4	3,521.4	26,012.19	.....	1,487.44
Magnetawan.....	69.2	295.2	3,088.09	.....	144.59
Markdale.....	522.9	2,432.0	19,943.78	.....	1,104.39
Markham.....	2,017.6	9,713.1	71,549.15	10,088.00	4,280.62
Marmora.....	610.1	3,071.2	24,175.87	.....	1,302.30
Martintown.....	139.8	517.2	4,555.79	.....	287.45
Maxville.....	380.4	1,553.1	14,487.63	.....	790.71
Meaford.....	2,244.0	11,334.0	86,704.70	.....	4,792.19
Merlin.....	246.2	1,091.2	8,890.24	1,231.00	516.81
Merrickville.....	355.7	1,795.1	12,625.36	.....	759.53
Merritton.....	15,321.2	86,423.2	481,385.07	76,606.00	33,251.08
Midland.....	6,463.9	32,131.5	209,480.00	.....	13,773.66
Mildmay.....	428.0	1,789.8	14,988.52	.....	892.14
Millbrook.....	353.5	1,625.8	13,233.96	.....	745.53
Milton.....	3,797.6	19,232.8	132,788.93	18,988.00	8,113.05
Milverton.....	784.9	2,980.8	28,844.10	3,924.50	1,618.34
Mimico.....	7,005.4	38,603.9	220,402.19	35,027.00	15,149.94
Mitchell.....	1,481.0	7,628.5	49,868.63	7,405.00	3,171.49
Moorefield.....	172.5	692.8	5,859.20	862.50	357.89
Morrisburg.....	1,134.7	5,686.7	41,657.99	.....	2,420.61
Mount Brydges.....	302.1	1,304.4	10,564.23	1,510.50	632.12
Mount Forest.....	1,511.7	6,739.2	54,136.23	.....	3,175.61
Napanee.....	3,018.7	14,897.4	111,283.25	.....	6,426.06
Neustadt.....	231.0	914.0	7,825.66	.....	478.45
Newboro.....	81.6	329.7	2,683.88	.....	169.43
Newburgh.....	221.4	968.0	7,939.96	.....	463.98
Newbury.....	96.8	399.2	3,835.72	484.00	201.44
Newcastle.....	743.4	3,482.7	23,678.91	.....	1,571.57
New Hamburg.....	1,123.1	5,319.3	38,715.88	5,615.50	2,377.66
Newmarket.....	5,095.5	25,840.5	163,656.68	25,477.50	10,887.87
New Toronto.....	23,735.7	127,023.4	751,064.89	118,678.50	51,108.99
Niagara.....	1,587.0	8,515.3	55,258.32	7,935.00	3,418.53
Niagara Falls.....	15,749.4	83,601.1	482,372.36	78,747.00	33,872.28
North York Twp.....	117,688.8	663,495.6	3,723,520.93	588,444.00	255,394.91
Norwich.....	898.5	4,068.0	31,654.51	4,492.50	1,891.14
Norwood.....	459.0	2,232.9	17,926.45	.....	975.20
Oakville.....	8,128.1	41,735.8	254,025.13	40,640.50	17,398.19
Oil Springs.....	209.2	1,188.2	8,271.00	1,046.00	454.50
Ormelee.....	347.9	1,608.0	12,834.08	.....	734.19
Orangeville.....	2,451.8	12,011.5	95,851.74	.....	5,214.08

## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
313.77	27,185.86	29,072.97	1,887.11	41.75	39.04
31.18	3,201.50	3,527.51	326.01	51.00	46.26
235.60	20,812.57	21,698.62	886.05	41.50	39.80
909.04	85,008.73	88,773.60	3,764.87	44.00	42.13
274.88	25,203.29	28,062.68	2,859.39	46.00	41.31
62.99	4,780.25	5,136.43	356.18	36.75	34.19
171.39	15,106.95	16,260.69	1,153.74	42.75	39.71
1,011.05	90,485.84	96,845.15	6,359.31	43.16	40.32
110.93	10,527.12	11,263.63	736.51	45.75	42.76
160.26	13,224.63	13,372.72	148.09	37.60	37.18
6,903.06	584,339.09	593,696.17	9,357.08	38.75	38.14
2,912.35	220,341.31	231,084.73	10,743.42	35.75	34.09
192.84	15,687.82	16,904.68	1,216.86	39.50	36.65
159.27	13,820.22	15,199.08	1,378.86	43.00	39.10
1,711.03	158,178.95	160,450.36	2,271.41	42.25	41.65
353.64	34,033.30	34,732.22	698.92	44.25	43.36
3,156.33	267,422.80	267,955.93	533.13	38.25	38.17
667.27	59,777.85	61,459.80	1,681.95	41.50	40.36
77.72	7,001.87	7,246.75	244.88	42.00	40.59
511.25	43,567.35	49,924.97	6,357.62	44.00	38.40
136.11	12,570.74	12,913.68	342.94	42.75	41.61
681.11	56,630.73	59,710.83	3,080.10	39.50	37.46
1,360.09	116,349.22	124,522.40	8,173.18	41.25	38.54
104.08	8,200.03	8,662.50	462.47	37.50	35.50
36.77	2,816.54	2,976.59	160.05	36.50	34.52
99.75	8,304.19	8,910.68	606.49	40.25	37.51
43.61	4,477.55	4,866.30	388.75	50.25	46.26
334.94	24,915.54	26,576.54	1,661.00	35.75	33.52
506.02	46,203.02	46,328.56	125.54	41.25	41.14
2,295.81	197,726.24	201,271.26	3,545.02	39.50	38.80
10,694.27	910,158.11	937,561.47	27,403.36	39.50	38.35
715.03	65,896.82	65,859.10	37.72	41.50	41.52
7,095.99	587,895.65	610,287.96	22,392.31	38.75	37.33
53,025.44	4,514,334.40	4,589,862.89	75,528.49	39.00	38.36
404.82	37,633.33	38,634.77	1,001.44	43.00	41.88
206.81	18,694.84	20,770.14	2,075.30	45.25	40.73
3,662.17	308,401.65	319,028.26	10,626.61	39.25	37.94
94.26	9,677.24	10,671.36	994.12	51.00	46.26
156.75	13,411.52	14,611.45	1,199.93	42.00	38.55
1,104.67	99,961.15	109,717.31	9,756.16	44.75	40.77

# SOUTHERN ONTARIO

## STATEMENT OF THE ALLOCATION

### for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Orillia .....	4,036.3	15,330.9	140,093.08	.....	8,322.35
Orono .....	386.5	1,687.2	13,005.31	.....	809.80
Oshawa .....	53,551.0	289,755.2	1,607,357.23	.....	115,495.56
Ottawa .....	126,024.6	663,041.0	3,770,912.73	.....	270,692.97
Otterville .....	324.6	1,456.4	11,084.11	1,623.00	682.44
Owen Sound .....	10,477.4	51,332.5	338,322.28	.....	22,281.77
Paisley .....	388.1	1,734.9	13,471.11	.....	815.56
Palmerston .....	1,009.3	5,004.7	34,185.64	5,046.50	2,149.95
Paris .....	3,176.5	14,675.4	96,699.04	15,882.50	6,703.10
Parkhill .....	638.6	2,904.0	24,540.29	3,193.00	1,344.86
Parry Sound .....	1,443.5	9,063.5	59,520.61	.....	3,186.97
Penetanguishene .....	2,244.4	11,776.9	72,755.44	.....	4,818.99
Perth .....	3,303.8	15,165.2	111,123.93	.....	6,965.94
Peterborough .....	33,751.7	190,345.1	1,054,323.62	.....	73,247.80
Petrolia .....	1,253.1	6,497.6	49,362.14	6,265.50	2,685.98
Petrolia Waterworks .....	149.7	649.2	5,286.48	748.50	313.40
Pickering .....	359.9	1,777.1	12,179.01	.....	766.19
Picton .....	3,214.4	16,379.4	107,876.56	.....	6,873.02
Plattsville .....	574.2	2,456.0	19,649.33	2,871.00	1,200.11
Point Edward .....	3,396.1	12,836.4	99,974.16	16,980.50	6,998.64
Port Burwell .....	197.1	871.6	7,435.55	985.50	413.63
Port Colborne .....	5,067.2	27,007.6	166,403.68	25,336.00	10,904.51
Port Credit .....	8,467.1	61,191.8	306,929.55	42,335.50	19,165.97
Port Dalhousie .....	1,412.4	8,369.0	50,274.19	7,062.00	3,088.93
Port Dover .....	1,658.0	8,729.3	56,340.41	8,290.00	3,561.65
Port Elgin .....	1,065.8	5,070.7	43,738.57	.....	2,257.70
Port Hope .....	6,806.0	36,764.9	242,691.11	.....	14,675.17
Port McNicoll .....	1,062.5	3,112.7	33,181.40	.....	2,136.44
Port Perry .....	1,031.8	4,999.2	39,029.90	.....	2,190.98
Port Rowan .....	224.4	1,032.1	8,825.89	1,122.00	473.26
Port Stanley .....	1,040.6	5,089.4	37,605.78	5,203.00	2,212.47
Prescott .....	3,163.3	14,852.1	107,479.44	.....	6,689.23
Preston .....	8,003.3	38,088.8	242,715.96	40,016.50	16,954.21
Priceville .....	42.2	158.4	1,677.02	.....	86.91
Princeton .....	217.8	946.0	7,805.01	1,089.00	456.06
Queenston .....	269.7	1,472.4	9,139.34	1,348.50	582.45
Renfrew .....	3,033.1	12,319.5	99,096.03	.....	6,300.88
Richmond .....	382.5	1,818.8	12,270.39	.....	810.20
Richmond Hill .....	6,542.8	32,376.1	231,514.34	32,714.00	13,933.11
Ridgetown .....	1,126.7	5,025.9	42,911.48	5,633.50	2,367.02
Ripley .....	249.4	1,092.4	10,199.78	.....	522.77



## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
1,818.58	146,596.85	150,350.61	3,753.76	37.25	36.32
174.14	13,640.97	14,686.05	1,045.08	38.00	35.29
24,127.75	1,698,725.04	1,834,122.32	135,397.28	34.25	31.72
56,781.17	3,984,824.53	4,032,786.14	47,961.61	32.00	31.62
146.25	13,243.30	14,036.78	793.48	43.25	40.80
4,720.66	355,883.39	377,187.30	21,303.91	36.00	33.97
174.86	14,111.81	15,137.21	1,025.40	39.00	36.36
454.75	40,927.34	42,138.28	1,210.94	41.75	40.55
1,431.19	117,853.45	123,088.08	5,234.63	38.75	37.10
287.73	28,790.42	29,374.44	584.02	46.00	45.08
650.38	62,057.20	62,070.84	13.64	43.00	42.99
1,011.23	76,563.20	80,799.00	4,235.80	36.00	34.11
1,488.55	116,601.32	124,718.15	8,116.83	37.75	35.29
15,207.04	1,112,364.38	1,172,870.14	60,505.76	34.75	32.96
564.59	57,749.03	59,523.84	1,774.81	47.50	46.08
67.45	6,280.93	7,109.96	829.03	47.50	41.96
162.16	12,783.04	14,034.80	1,251.76	39.00	35.52
1,448.27	113,301.31	121,341.71	8,040.40	37.75	35.25
258.71	23,461.73	24,835.96	1,374.23	43.25	40.86
1,530.13	122,423.17	134,994.98	12,571.81	39.75	36.05
88.80	8,745.88	9,705.52	959.64	49.25	44.37
2,283.06	200,361.13	207,755.20	7,394.07	41.00	39.54
3,814.91	364,616.11	359,849.63	4,766.48	42.50	43.06
636.37	59,788.75	60,027.01	238.26	42.50	42.33
747.02	67,445.04	66,320.00	1,125.04	40.00	40.68
480.20	45,516.07	48,228.23	2,712.16	45.25	42.71
3,066.49	254,299.79	282,447.97	28,148.18	41.50	37.36
478.72	34,839.12	36,655.12	1,816.00	34.50	32.79
464.88	40,756.00	43,335.25	2,579.25	42.00	39.50
101.10	10,320.05	10,880.98	560.93	48.50	45.99
468.85	44,552.40	47,088.23	2,535.83	45.25	42.81
1,425.25	112,743.42	120,206.97	7,463.55	38.00	35.64
3,605.94	296,080.73	294,122.51	1,958.22	36.75	36.99
19.01	1,744.92	1,871.75	126.83	44.35	41.35
98.13	9,251.94	10,128.13	876.19	46.50	42.48
121.52	10,948.77	11,057.36	108.59	41.00	40.60
1,366.58	104,030.33	109,191.30	5,160.97	36.00	34.30
172.34	12,908.25	13,387.52	479.27	35.00	33.75
2,947.90	275,213.55	282,976.80	7,763.25	43.25	42.06
507.64	50,404.36	54,361.65	3,957.29	48.25	44.74
112.37	10,610.18	11,284.98	674.80	45.25	42.54

## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Riverside.....	4,853.7	23,022.4	162,760.63	24,268.50	10,277.56
Rockland.....	751.6	3,379.8	24,010.28	.....	1,580.60
Rockwood.....	341.7	1,639.3	13,439.44	1,708.50	724.63
Rodney.....	396.4	1,743.7	15,700.67	1,982.00	831.33
Rosseau.....	81.5	313.8	3,038.27	.....	168.29
Russell.....	238.2	1,061.0	7,589.79	.....	500.33
St. Catharines.....	40,454.1	203,550.9	1,210,792.96	202,270.50	86,346.59
St. Clair Beach.....	510.7	2,268.4	17,141.70	2,553.50	1,072.33
St. George.....	386.2	1,786.8	13,429.84	1,931.00	815.11
St. Jacobs.....	438.0	1,677.2	16,308.12	2,190.00	903.90
St. Mary's.....	7,834.9	51,543.8	253,833.51	39,174.50	17,436.15
St. Thomas.....	12,510.2	70,369.8	378,818.02	62,551.00	27,138.86
Sandwich East Twp.....	5,129.9	25,434.5	170,725.41	25,649.50	10,927.23
Sandwich West Twp.....	7,951.7	38,511.0	261,972.73	39,758.50	16,884.19
Sarnia.....	40,552.2	280,086.7	1,341,093.54	202,761.00	91,029.37
Scarborough Twp.....	99,596.5	531,514.9	3,107,785.26	497,982.50	214,369.30
Seaforth.....	1,437.5	6,686.8	37,126.07	7,187.50	3,036.12
Shelburne.....	724.4	3,201.6	29,421.88	.....	1,520.10
Simcoe.....	6,473.8	33,552.2	201,330.82	32,369.00	13,875.45
Smith's Falls.....	6,246.5	29,346.2	187,495.89	.....	13,210.14
Smithville.....	461.4	1,880.5	16,285.93	2,307.00	958.88
Southampton.....	978.6	4,936.3	40,382.10	.....	2,089.48
Springfield.....	190.1	863.6	6,275.41	950.50	400.29
Stamford Twp.....	13,477.1	72,399.1	418,734.57	67,385.50	29,035.82
Stayner.....	864.7	4,015.2	33,166.47	.....	1,825.90
Stirling.....	712.2	3,288.0	22,312.05	.....	1,502.76
Stoney Creek.....	2,943.3	15,428.3	99,527.99	14,716.50	6,318.67
Stouffville.....	1,502.8	6,900.0	54,454.03	7,514.00	3,168.71
Stratford.....	13,982.6	72,162.0	411,782.75	69,913.00	29,951.20
Strathroy.....	3,062.8	15,789.3	93,612.55	15,314.00	6,559.60
Streetsville.....	2,342.9	11,552.6	82,270.18	11,714.50	4,986.87
Sunderland.....	332.3	1,454.4	13,204.18	.....	696.47
Sundridge.....	251.3	1,194.8	11,206.90	.....	532.29
Sutton.....	874.0	4,418.3	34,589.53	4,370.00	1,866.71
Swansea.....	4,951.1	29,103.5	159,997.44	24,755.50	10,814.35
Tara.....	297.1	1,268.4	11,616.57	.....	620.82
Tavistock.....	729.5	3,457.6	25,773.47	3,647.50	1,544.54
Tecumseh.....	1,129.2	5,413.4	38,471.31	5,646.00	2,394.42
Teeswater.....	514.6	2,506.8	20,218.86	.....	1,093.53
Thamesford.....	459.7	2,198.4	18,200.38	2,298.50	974.46

## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
2,186.87	195,119.82	200,214.45	5,094.63	41.25	40.20
338.64	25,252.24	26,869.09	1,616.85	35.75	33.60
153.96	15,718.61	15,803.25	84.64	46.25	46.00
178.60	18,335.40	20,217.27	1,881.87	51.00	46.26
36.72	3,169.84	3,442.66	272.82	42.25	38.89
107.32	7,982.80	8,454.93	472.13	35.50	33.51
18,226.85	1,481,183.20	1,517,028.44	35,845.24	37.50	36.61
230.10	20,537.43	20,940.07	402.64	41.00	40.21
174.00	16,001.95	16,797.53	795.58	43.50	41.43
197.34	19,204.68	19,488.80	284.12	44.50	43.85
3,530.06	306,914.10	302,414.27	4,499.83	38.60	39.17
5,636.55	462,871.33	481,642.70	18,771.37	38.50	37.00
2,311.31	204,990.83	218,021.81	13,030.98	42.50	39.96
3,582.69	315,032.73	337,949.02	22,916.29	42.50	39.62
18,271.05	1,616,612.86	1,662,640.22	46,027.36	41.00	39.98
44,873.84	3,775,263.22	3,909,162.31	133,899.09	39.25	37.91
647.67	46,702.02	49,234.66	2,532.64	34.25	32.49
326.38	30,615.60	33,685.79	3,070.19	46.50	42.26
2,916.81	244,658.46	249,242.92	4,584.46	38.50	37.79
2,814.40	197,891.63	209,257.46	11,365.83	33.50	31.68
207.89	19,343.92	21,800.36	2,456.44	47.25	41.92
440.91	42,030.67	44,525.91	2,495.24	45.50	42.95
85.65	7,540.55	8,460.93	920.38	44.50	39.67
6,072.19	509,083.70	512,131.06	3,047.36	38.00	37.77
389.60	34,602.77	36,099.86	1,497.09	41.75	40.02
320.89	23,493.92	24,750.40	1,256.48	34.75	32.99
1,326.12	119,237.04	122,884.17	3,647.13	41.75	40.51
677.10	64,459.64	66,497.82	2,038.18	44.25	42.89
6,299.95	505,347.00	524,347.84	19,000.84	37.50	36.14
1,379.96	114,106.19	117,151.47	3,045.28	38.25	37.26
1,055.61	97,915.94	98,401.80	485.86	42.00	41.79
149.72	13,750.93	14,623.02	872.09	44.00	41.38
113.22	11,625.97	12,814.20	1,188.23	51.00	46.26
393.79	40,432.45	41,954.00	1,521.55	48.00	46.26
2,230.75	193,336.54	196,804.57	3,468.03	39.75	39.05
133.86	12,103.53	12,847.77	744.24	43.25	40.74
328.68	30,636.83	31,185.06	548.23	42.75	42.00
508.77	46,002.96	48,273.66	2,270.70	42.75	40.74
231.86	21,080.53	22,822.41	1,741.88	44.35	40.96
207.12	21,266.22	21,835.75	569.53	47.50	46.26



## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Thamesville.....	568.9	2,374.3	21,925.99	2,844.50	1,185.55
Thedford.....	326.4	1,600.4	12,920.89	1,632.00	694.21
Thornbury.....	487.6	2,308.8	19,032.76	.....	1,032.24
Thorndale.....	197.3	798.8	6,971.09	986.50	409.71
Thornton.....	109.0	424.6	3,710.83	.....	225.37
Thorold.....	9,769.7	60,381.0	314,002.86	48,848.50	21,513.02
Tilbury.....	1,037.7	4,764.9	41,094.86	5,188.50	2,188.05
Tillsonburg.....	4,068.9	19,285.9	116,451.03	20,344.50	8,614.95
Toronto.....	531,438.8	3,144,648.5	16,416,627.68	2,657,194.00	1,162,007.16
Toronto Twp.....	44,361.2	288,512.4	1,497,045.26	221,806.00	98,527.63
Tottenham.....	321.8	1,573.8	12,496.04	.....	684.19
Trafalgar Twp.....	10,588.9	57,674.1	350,783.20	52,944.50	22,859.82
Trenton.....	14,343.8	81,180.8	435,874.97	.....	31,145.78
Tweed.....	885.9	4,123.3	29,291.14	.....	1,871.23
Uxbridge.....	1,321.3	6,237.6	50,419.50	.....	2,796.06
Vankleek Hill.....	452.0	1,996.0	16,406.24	.....	948.39
Victoria Harbour.....	276.3	1,218.4	10,523.01	.....	579.64
Walkerton.....	2,278.2	9,487.0	77,879.65	.....	4,746.42
Wallaceburg.....	7,636.6	42,160.9	241,980.82	38,183.00	16,519.61
Wardsville.....	138.2	618.6	5,473.50	691.00	290.46
Warkworth.....	223.6	857.5	7,285.13	.....	461.51
Wasaga Beach.....	598.7	2,181.4	22,285.99	.....	1,229.00
Waterdown.....	901.2	4,346.4	28,536.44	4,506.00	1,912.49
Waterford.....	834.1	3,688.2	28,143.12	4,170.50	1,750.41
Waterloo.....	13,218.8	68,183.4	353,961.16	66,094.00	28,312.96
Watford.....	945.7	4,112.5	34,955.14	4,728.50	1,980.54
Waubashene.....	273.1	1,184.0	10,285.81	.....	571.73
Welland.....	12,346.9	61,366.1	370,293.92	61,734.50	26,308.98
Wellesley.....	364.3	1,417.3	12,432.04	1,821.50	753.12
Wellington.....	487.0	2,278.9	18,177.77	.....	1,029.38
West Lorne.....	817.9	3,650.0	32,394.08	4,089.50	1,718.37
Weston.....	7,709.2	41,474.6	240,924.78	38,546.00	16,612.71
Westport.....	316.9	1,411.2	10,686.08	.....	665.62
Wheatley.....	695.3	3,126.5	26,512.00	3,476.50	1,462.19
Whitby.....	8,836.8	46,018.7	267,016.32	.....	18,953.04
Wiarton.....	1,019.8	5,322.4	40,489.94	.....	2,187.93
Williamsburg.....	195.4	873.0	7,916.73	.....	410.59
Winchester.....	952.8	4,649.6	36,363.53	.....	2,025.19
Windermere.....	108.2	451.2	3,865.99	.....	225.46
Windsor.....	73,086.4	364,853.5	2,196,538.33	365,432.00	155,827.96

## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
256.32	25,699.72	26,027.56	327.84	45.75	45.17
147.06	15,100.04	15,991.98	891.94	49.00	46.26
219.69	19,845.31	20,887.12	1,041.81	42.84	40.70
88.89	8,278.41	8,383.12	104.71	42.50	41.96
49.11	3,887.09	4,088.14	201.05	37.50	35.66
4,401.80	379,962.58	388,346.26	8,383.68	39.75	38.89
467.54	48,003.87	49,548.99	1,545.12	47.75	46.26
1,833.27	143,577.21	149,531.77	5,954.56	36.75	35.29
239,443.15	19,996,385.69	20,327,532.19	331,146.50	38.25	37.63
19,987.22	1,797,391.67	1,818,810.91	21,419.24	41.00	40.52
144.99	13,035.24	13,999.40	964.16	43.50	40.51
4,770.90	421,816.62	444,733.45	22,916.83	42.00	39.84
6,462.69	460,558.06	459,002.40	1,555.66	32.00	32.11
399.15	30,763.22	32,334.14	1,570.92	36.50	34.73
595.32	52,620.24	55,823.53	3,203.29	42.25	39.82
203.65	17,150.98	17,855.05	704.07	39.50	37.94
124.49	10,978.16	11,730.10	751.94	42.45	39.73
1,026.45	81,599.62	86,001.41	4,401.79	37.75	35.82
3,440.72	293,242.71	307,373.84	14,131.13	40.25	38.40
62.27	6,392.69	6,945.83	553.14	50.25	46.26
100.74	7,645.90	8,830.88	1,184.98	39.50	34.19
269.75	23,245.24	25,145.75	1,900.51	42.00	38.83
406.04	34,548.89	36,724.89	2,176.00	40.75	38.34
375.81	33,688.22	35,864.89	2,176.67	43.00	40.39
5,955.81	442,412.31	459,352.72	16,940.41	34.75	33.47
426.09	41,238.09	42,317.85	1,079.76	44.75	43.61
123.05	10,734.49	11,198.81	464.32	41.00	39.31
5,562.97	452,774.43	475,354.37	22,579.94	38.50	36.67
164.14	14,842.52	15,299.55	457.03	42.00	40.74
219.42	18,987.73	19,968.36	980.63	41.00	38.99
368.51	37,833.44	41,510.12	3,676.68	50.75	46.26
3,473.43	292,610.06	304,514.71	11,904.65	39.50	37.96
142.78	11,208.92	11,961.08	752.16	37.75	35.37
313.27	31,137.42	32,157.63	1,020.21	46.25	44.78
3,981.48	281,987.88	304,871.04	22,883.16	34.50	31.91
459.48	42,218.39	45,382.97	3,164.58	44.50	41.40
88.04	8,239.28	8,990.30	751.02	46.00	42.17
429.29	37,959.43	40,254.39	2,294.96	42.25	39.84
48.75	4,042.70	4,244.90	202.20	39.25	37.36
32,929.54	2,684,868.75	2,832,098.64	147,229.89	38.75	36.74

SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt- hours	\$	\$	\$
Wingham.....	1,729.1	9,189.5	66,038.31	.....	3,719.43
Woodbridge.....	1,800.8	9,225.3	62,608.64	9,004.00	3,853.35
Woodstock.....	15,604.8	84,450.2	474,345.87	78,024.00	33,656.40
Woodville.....	179.5	758.0	7,753.51	.....	374.59
Wyoming.....	316.5	1,317.6	12,062.13	1,582.50	659.37
York Township.....	53,379.5	313,651.2	1,666,663.66	266,897.50	116,586.03
Zurich.....	314.8	1,322.4	12,168.76	1,574.00	656.53
St. Lawrence Project—Customers.....	18.8	80.7	1,841.44	.....	39.32
Total—Municipalities.....	2,518,461.4	13,976,583.9	79,169,238.40	10,192,895.50	5,452,233.29
Total—Rural Power District.....	432,133.8	2,185,504.5	15,023,352.26	1,312,775.00	923,017.30
Total—Companies.....	624,091.8	5,735,849.7	21,951,181.76	3,260,424.51	1,422,454.56
25-cycle Secondary customers.....	.....	1,551,618.7	.....	.....	.....
Total—Local distribution systems...	1,086.1	4,268.1	94,334.85	.....	2,247.80
GRAND TOTAL.....	3,575,773.1	23,453,824.9	116,238,107.27	14,766,095.01	7,799,952.95

Notes on Allocation of Cost of Power  
SOUTHERN ONTARIO SYSTEM

1. The average peak load supplied in the year represents primary power only. 60-cycle secondary energy exported is included in energy supplied to companies, and other secondary energy (which is almost entirely 25-cycle energy) appears separately on the statement of the allocation of the cost of power.

2. The total of \$116,238,107 shown under the heading "Power purchased, operating costs and net fixed charges" includes the following items of cost shown in the Statement of Operations:

Cost of power purchased.....	\$ 13,819,110
Operation, maintenance and administrative expenses.....	43,479,589
Interest.....	44,620,222
Depreciation.....	10,667,517
Sinking fund provision.....	12,655,670
Interchange of power with Northern Ontario Properties.....	3,509,062
Sale of 25-cycle secondary energy.....	5,096,253
Credit resulting from matured sinking fund.....	398,686
	<u>\$116,238,107</u>

Interchange of power, \$3,509,062, represents the cost of 1,099,669 megawatt-hours of energy transferred to the Northern Ontario Properties. The megawatt-hours transferred are not included in the total of 23,453,824.9 megawatt-hours of energy supplied during the year.

Revenue from the sale of 25-cycle secondary energy, \$5,096,253, and related costs, \$1,700,284, have in 1958 been taken into account in determining the cost of power, and cost to all customers have accordingly been reduced by the net revenue of \$3,395,969. In 1957 and prior years, such revenue and the related costs were included in amounts billed and costs allocated to companies.



## SYSTEM

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Net revenue from direct customers	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
779.06	68,978.68	73,487.11	4,508.43	42.50	39.89
811.36	74,654.63	77,435.84	2,781.21	43.00	41.46
7,030.84	578,995.43	592,983.66	13,988.23	38.00	37.10
80.87	8,047.23	8,481.77	434.54	47.25	44.83
142.60	14,161.40	14,320.12	158.72	45.25	44.74
24,050.47	2,026,096.72	2,055,110.75	29,014.03	38.50	37.96
141.87	14,257.42	14,557.19	299.77	46.25	45.29
.....	1,880.76	1,291.84	588.92	.....	100.04
1,134,700.40	93,679,666.79	96,507,830.58	2,828,163.79	.....	.....
194,700.64	17,064,443.92	17,064,443.92	.....	.....	.....
1,340,005.69	27,974,066.52	27,974,066.52	.....	.....	.....
.....	.....	.....	.....	.....	.....
10,604.65	85,978.00	85,978.00	.....	.....	.....
.....	138,804,155.23	141,632,319.02	2,828,163.79	.....	.....

3. Frequency standardization costs are shown in the Statement of Operations as follows:

Interest .....	\$ 7,545,750
Portion of cost written off .....	7,220,345
	<u>\$14,766,095</u>

This represents a charge to all customers in the Niagara Division (except certain companies which will not be standardized at 60 cycles) at the rate of \$5 per kilowatt on the average monthly peak load supplied amounting to \$12,401,065 plus an amount equal to the net revenue on the export of 60-cycle secondary energy amounting to \$2,365,030. The latter amount is included in the \$3,260,425 frequency standardization cost charged to companies.

4. The provision for stabilization of rates and contingencies consists of:

Provision for stream-flow variation .....	\$ 5,363,660
Provision for nuclear research .....	2,436,293
	<u>\$ 7,799,953</u>

The provision for stream-flow variation represents a charge of \$1.50 per kilowatt on the average monthly peak load supplied to all customers.

The provision for nuclear research was charged to all customers on the basis of 50 per cent on the quantity of energy supplied and 50 per cent on average monthly peak loads. It represents the Southern Ontario System's share of a total provision of \$3,000,000 charged to the Southern Ontario System and the Northern Ontario Properties in proportion to their average monthly peak loads.

## SOUTHERN ONTARIO SYSTEM

## STATEMENT OF SINKING FUND EQUITY

as at December 31, 1958

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Acton.....	310,162.30	26,410.61	366.34	336,939.25	28,587.84	1,143.51	301.03
Ailsa Craig.....	46,857.51	3,000.19	.....	49,857.70	1,107.31	44.29	11.66
Ajax.....	30,496.94	20,835.28	.....	51,332.22	.....	.....	.....
Alexandria.....	110,591.18	10,848.85	.....	121,440.03	.....	.....	.....
Alfred.....	3,006.78	1,406.04	.....	4,412.82	.....	.....	.....
Alliston.....	106,737.09	11,019.75	.....	117,756.84	879.39	35.18	9.26
Almonte.....	36,426.19	6,460.76	.....	42,886.95	.....	.....	.....
Alvinston.....	46,035.98	2,888.23	.....	48,924.21	.....	.....	.....
Amherstburg.....	241,574.14	21,927.45	.....	263,501.59	33,584.05	1,343.37	353.64
Ancaster Twp.....	91,573.99	11,520.59	.....	103,094.58	.....	.....	.....
Apple Hill.....	10,876.92	791.57	.....	11,668.49	.....	.....	.....
Arkona.....	25,022.41	2,141.85	.....	27,164.26	.....	.....	.....
Arnprior.....	149,299.68	21,490.10	.....	170,789.78	.....	.....	.....
Arthur.....	66,222.55	5,378.96	.....	71,601.51	.....	.....	.....
Athens.....	26,837.94	2,465.77	.....	29,303.71	.....	.....	.....
Aurora.....	120,307.31	18,530.91	99.67	138,937.89	.....	.....	.....
Aylmer.....	213,685.47	22,829.39	893.48	237,408.34	708.45	28.34	7.46
Ayr.....	57,781.72	5,038.39	.....	62,820.11	520.42	20.82	5.48
Baden.....	102,263.47	5,750.69	.....	108,014.16	28,169.04	1,126.76	296.62
Bancroft.....	13,672.37	6,963.94	954.35	21,590.66	.....	.....	.....
Barrie.....	726,779.72	81,967.96	.....	808,747.68	13,796.77	551.87	145.28
Barry's Bay.....	7,122.25	1,586.44	.....	8,708.69	.....	.....	.....
Bath.....	12,707.34	1,661.67	.....	14,369.01	.....	.....	.....
Beachville.....	154,984.49	14,826.33	.....	169,810.82	30,511.87	1,220.47	321.29
Beamsville.....	62,086.51	8,239.06	.....	70,325.57	.....	.....	.....
Beaverton.....	75,419.64	7,475.05	.....	82,894.69	.....	.....	.....
Beeton.....	48,751.11	3,732.88	.....	52,483.99	588.79	23.55	6.20
Belle River.....	49,417.06	4,653.93	.....	54,070.99	.....	.....	.....
Belleville.....	959,783.43	98,831.29	2,769.49	1,061,384.21	.....	.....	.....
Blenheim.....	140,532.40	10,897.88	.....	151,430.28	1,030.39	41.22	10.85
Bloomfield.....	29,313.91	2,696.44	.....	32,010.35	.....	.....	.....
Blyth.....	43,186.65	4,293.29	.....	47,479.94	.....	.....	.....
Bobcaygeon.....	18,160.42	3,403.00	.....	21,563.42	.....	.....	.....
Bolton.....	63,588.19	6,155.34	60.78	69,804.31	1,291.55	51.66	13.60
Bothwell.....	53,559.17	3,710.04	.....	57,269.21	700.85	28.03	7.38
Bowmanville.....	364,812.66	36,091.18	259.29	401,163.13	.....	.....	.....
Bracebridge.....	1,499.72	162.87	.....	1,662.59	.....	.....	.....
Bradford.....	82,788.45	9,235.89	.....	92,024.34	59.83	2.39	.63
Braeside.....	12,787.15	2,042.30	.....	14,829.45	.....	.....	.....
Brampton.....	658,894.31	58,548.42	.....	717,442.73	75,603.04	3,024.12	796.10

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1958**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Brantford.....	3,753,119.44	307,355.02	4,415.98	4,064,890.44	32,092.12	1,283.68	337.93
Brantford Twp.....	84,353.06	20,750.86	69,566.60	174,670.52	.....	.....	.....
Brechin.....	21,127.43	1,412.85	.....	22,540.28	.....	.....	.....
Bridgeport.....	37,479.45	4,291.93	278.02	42,049.40	.....	.....	.....
Bridgen.....	36,590.23	2,403.89	.....	38,994.12	281.10	11.24	2.96
Brighton.....	70,918.39	7,919.19	.....	78,837.58	.....	.....	.....
Brockville.....	839,259.62	86,950.59	8,426.23	934,636.44	.....	.....	.....
Bronte.....	16,263.28	4,327.83	.....	20,591.11	.....	.....	.....
Brussels.....	52,649.21	4,638.36	9.69	57,297.26	.....	.....	.....
Burford.....	56,287.07	5,079.45	86.20	61,452.72	425.45	17.02	4.48
Burgessville.....	18,886.44	1,456.35	.....	20,342.79	290.60	11.62	3.06
Burk's Falls.....	10,373.00	2,236.76	.....	12,609.76	.....	.....	.....
Burlington.....	169,113.40	47,095.43	.....	216,208.83	.....	.....	.....
Caledonia.....	85,254.27	6,745.24	.....	91,999.51	7,321.94	292.88	77.10
Campbellville.....	11,837.09	1,067.69	.....	12,904.78	113.96	4.56	1.20
Cannington.....	57,120.82	4,869.82	.....	61,990.64	.....	.....	.....
Cardinal.....	46,123.63	5,722.51	.....	51,846.14	.....	.....	.....
Carleton Place.....	308,995.76	25,049.77	.....	334,045.53	.....	.....	.....
Casselman.....	8,385.03	2,721.84	.....	11,106.87	.....	.....	.....
Cayuga.....	38,001.69	3,080.56	.....	41,082.25	.....	.....	.....
Chalk River.....	3,291.94	1,506.06	3,507.38	8,305.38	.....	.....	.....
Chatham.....	1,511,244.61	120,418.34	.....	1,631,662.95	15,443.49	617.74	162.62
Chatsworth.....	20,783.83	1,920.63	.....	22,704.46	.....	.....	.....
Chesley.....	130,896.21	9,877.39	.....	140,773.60	.....	.....	.....
Chesterville.....	96,228.37	8,831.06	.....	105,059.43	.....	.....	.....
Chippawa.....	66,243.31	6,575.17	294.35	73,112.83	.....	.....	.....
Clifford.....	30,123.34	2,737.53	.....	32,860.87	.....	.....	.....
Clinton.....	179,799.72	15,393.63	30.37	195,223.72	1,493.83	59.75	15.73
Cobden.....	21,422.08	2,876.24	.....	24,298.32	.....	.....	.....
Cobourg.....	370,286.03	48,955.55	.....	419,241.58	.....	.....	.....
Colborne.....	36,984.16	4,764.61	.....	41,748.77	.....	.....	.....
Coldwater.....	46,180.67	3,793.25	.....	49,973.92	1,063.63	42.55	11.20
Collingwood.....	512,759.51	43,549.11	.....	556,308.62	52,338.08	2,093.52	551.12
Comber.....	54,566.17	3,344.51	.....	57,910.68	256.41	10.26	2.70
Cookstown.....	22,860.96	2,214.45	.....	25,075.41	611.59	24.46	6.44
Cottam.....	19,596.65	1,664.39	.....	21,261.04	.....	.....	.....
Courtright.....	19,370.91	1,462.23	.....	20,833.14	.....	.....	.....
Creemore.....	42,098.51	3,601.65	.....	45,700.16	1,200.38	48.02	12.64
Dashwood.....	30,838.34	2,326.28	.....	33,164.62	595.44	23.82	6.27
Deep River.....	.....	4,628.56	6,965.53	11,594.09	.....	.....	.....



SOUTHERN ONTARIO SYSTEM  
STATEMENT OF SINKING FUND EQUITY  
as at December 31, 1958  
(continued)

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of the sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958			
						Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Delaware.....	15,968.69	1,580.61	.....	17,549.30	98.77	3.95	1.04
Delhi.....	81,495.44	12,314.54	.....	93,809.98	.....	.....	.....
Deseronto.....	48,005.24	5,918.65	.....	53,923.89	.....	.....	.....
Dorchester.....	29,060.84	2,543.65	.....	31,604.49	212.73	8.51	2.24
Drayton.....	43,047.57	3,046.08	.....	46,093.65	410.26	16.41	4.32
Dresden.....	119,727.09	9,494.18	.....	129,221.27	1,132.95	45.32	11.93
Drumbo.....	24,864.67	1,942.90	.....	26,807.57	186.13	7.45	1.96
Dublin.....	18,982.84	1,631.63	.....	20,614.47	344.73	13.79	3.63
Dundalk.....	49,920.58	4,061.12	.....	53,981.70	.....	.....	.....
Dundas.....	522,690.06	40,416.09	823.81	563,929.96	94,406.46	3,776.26	994.10
Dunnville.....	269,289.53	25,839.37	.....	295,128.90	468.19	18.73	4.93
Durham.....	111,201.27	10,427.67	.....	121,628.94	.....	.....	.....
Dutton.....	63,029.22	4,269.29	.....	67,298.51	704.65	28.19	7.42
East York Twp.....	1,731,902.02	208,792.13	.....	1,940,694.15	.....	.....	.....
Eganville.....	4,992.61	1,938.97	.....	6,931.58	.....	.....	.....
Elmira.....	292,871.50	25,189.08	.....	318,060.58	1,959.16	78.37	20.63
Elmvale.....	52,334.35	4,137.64	.....	56,471.99	3,860.40	154.42	40.65
Elmwood.....	17,636.67	1,409.91	.....	19,046.58	.....	.....	.....
Elora.....	122,507.24	8,160.97	.....	130,668.21	2,122.51	84.90	22.35
Embro.....	39,326.10	3,005.37	.....	42,331.47	294.40	11.78	3.10
Erieau.....	32,458.26	2,935.32	.....	35,393.58	.....	.....	.....
Erie Beach.....	6,047.25	475.93	.....	6,523.18	.....	.....	.....
Erin.....	10,298.87	2,467.11	.....	12,765.98	.....	.....	.....
Essex.....	133,071.70	10,436.87	.....	143,508.57	19,368.47	774.74	203.95
Etobicoke Twp.....	2,291,033.13	451,651.73	14,046.97	2,756,731.83	2,186.13	87.45	23.02
Exeter.....	174,034.16	15,034.83	.....	189,068.99	1,805.32	72.21	19.01
Fergus.....	269,364.70	24,293.92	104.55	293,763.17	1,452.99	58.12	15.30
Finch.....	19,514.61	1,729.67	.....	21,244.28	.....	.....	.....
Flesherton.....	24,194.32	2,128.61	.....	26,322.93	.....	.....	.....
Fonthill.....	44,609.59	6,110.61	.....	50,720.20	.....	.....	.....
Forest.....	134,830.39	11,200.89	.....	146,031.28	1,259.26	50.37	13.26
Forest Hill.....	897,492.07	85,039.22	.....	982,531.29	.....	.....	.....
Frankford.....	13,961.53	2,816.73	.....	16,778.26	.....	.....	.....
Galt.....	2,034,688.75	149,066.27	13,027.72	2,196,782.74	234,930.67	9,397.23	2,473.82
Georgetown.....	421,269.23	41,258.82	4,545.24	467,073.29	4,358.02	174.32	45.89
Glencoe.....	67,665.68	4,992.86	.....	72,658.54	.....	.....	.....
Goderich.....	448,120.60	38,104.05	.....	486,224.65	4,141.50	165.66	43.61
Grand Bend.....	19,472.61	4,017.32	11,996.55	35,486.48	113.96	4.56	1.20
Grand Valley.....	45,926.80	3,810.27	.....	49,737.07	.....	.....	.....
Granton.....	23,469.14	1,365.25	.....	24,834.39	505.22	20.21	5.32

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1958**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Gravenhurst.....	165,920.04	17,098.23		183,018.27			
Grimsby.....	89,008.18	14,145.50	689.97	103,843.65			
Guelph.....	2,392,668.95	194,670.79	7,050.16	2,594,389.90	217,005.70	8,680.23	2,285.07
Hagersville.....	247,102.16	17,478.71		264,580.87	1,403.61	56.14	14.78
Hamilton.....	21,372,925.79	1,897,963.52	50,891.40	23,321,780.71	588,945.87	23,557.83	6,201.60
Hanover.....	303,537.80	25,652.22		329,190.02			
Harriston.....	126,617.15	10,118.48		136,735.63	991.45	39.66	10.44
Harrow.....	114,600.81	9,619.93		124,220.74	6,473.88	258.96	68.17
Hastings.....	22,884.57	2,522.68		25,407.25			
Havelock.....	44,650.50	3,680.60		48,331.10			
Hawkesbury.....	25,771.64	9,764.93		35,536.57			
Hensall.....	64,010.92	5,761.48		69,772.40	566.00	22.64	5.96
Hespeler.....	481,100.03	36,381.25	760.30	518,241.58	34,273.50	1,370.94	360.90
Highgate.....	30,381.14	2,050.26		32,431.40	676.16	27.05	7.12
Holstein.....	9,469.71	788.17		10,257.88			
Huntsville.....	245,837.59	21,009.84	62.05	266,909.48			
Ingersoll.....	636,390.11	41,540.43		677,930.54	86,174.74	3,446.99	907.42
Iroquois.....	29,717.69	4,412.35		34,130.04			
Jarvis.....	49,671.41	3,406.77		53,078.18			
Kemptville.....	93,868.86	9,774.28		103,643.14			
Kincardine.....	177,438.68	16,007.38		193,446.06			
Kingston.....	1,430,071.63	195,924.05	4,262.48	1,630,258.16			
Kingsville.....	159,120.40	12,154.22		171,274.62	20,932.57	837.30	220.42
Kirkfield.....	10,588.79	786.17		11,374.96			
Kitchener.....	4,933,114.26	390,492.83	35,958.58	5,359,565.67	351,541.31	14,061.65	3,701.73
Lakefield.....	75,120.68	7,279.46		82,400.14			
Lambeth.....	45,771.58	4,986.43		50,758.01	204.18	8.17	2.15
Lanark.....	25,369.67	2,200.18		27,569.85			
Lancaster.....	20,452.77	1,798.40		22,251.17			
La Salle.....	71,742.44	7,726.12		79,468.56			
Leamington.....	403,062.15	37,594.18	355.85	441,012.18	24,666.67	986.67	259.74
Lindsay.....	516,300.99	50,534.11		566,835.10			
Listowel.....	298,605.07	23,580.35		322,185.42	2,637.23	105.49	27.77
London.....	8,029,479.63	533,452.02	1,519.75	8,564,451.40	744,827.16	29,793.08	7,843.03
London Twp.....	104,037.32	10,184.17		114,221.49			
Long Branch.....	255,346.74	36,005.09		291,351.83			
L'Orignal.....	4,433.70	1,393.97		5,827.67			
Lucan.....	63,267.16	4,864.32		68,131.48	1,755.94	70.24	18.49
Lucknow.....	77,176.98	5,923.80		83,100.78			
Lynden.....	39,028.92	2,637.24	31.21	41,697.37	945.87	37.83	9.96

SOUTHERN ONTARIO SYSTEM

STATEMENT OF SINKING FUND EQUITY

as at December 31, 1958

(continued)

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958			
						Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Madoc.....	48,939.76	5,304.62	.....	54,244.38	.....	.....	.....
Magnetawan.....	1,975.85	447.21	.....	2,423.06	.....	.....	.....
Markdale.....	43,504.69	4,201.43	.....	47,706.12	.....	.....	.....
Markham.....	93,856.76	13,124.33	1,181.89	108,162.98	.....	.....	.....
Marmora.....	33,336.27	4,409.11	77.89	37,823.27	.....	.....	.....
Martintown.....	9,183.83	956.29	.....	10,140.12	.....	.....	.....
Maxville.....	35,322.33	3,248.00	.....	38,570.33	.....	.....	.....
Meaford.....	156,663.74	16,981.95	.....	173,645.69	.....	.....	.....
Merlin.....	36,041.66	2,581.68	.....	38,623.34	.....	.....	.....
Merrickville.....	10,473.53	2,024.09	.....	12,497.62	.....	.....	.....
Merritton.....	1,035,841.36	106,304.98	.....	1,142,146.34	.....	.....	.....
Midland.....	748,367.14	55,131.44	.....	803,498.58	38,448.24	1,537.93	404.86
Mildmay.....	24,408.49	2,853.47	.....	27,261.96	.....	.....	.....
Millbrook.....	16,683.57	2,355.76	.....	19,039.33	.....	.....	.....
Milton.....	354,638.68	31,364.02	.....	386,002.70	4,850.90	194.04	51.08
Milverton.....	131,945.36	8,866.52	.....	140,811.88	2,979.11	119.16	31.37
Mimico.....	550,271.47	50,877.45	.....	601,148.92	18,402.66	736.11	193.78
Mitchell.....	163,209.39	11,769.75	.....	174,979.14	29,209.88	1,168.40	307.58
Moorefield.....	21,441.88	1,618.15	.....	23,060.03	205.13	8.21	2.16
Morrisburg.....	46,514.61	7,219.15	.....	53,733.76	.....	.....	.....
Mount Brydges.....	27,877.72	2,462.59	.....	30,340.31	320.04	12.80	3.37
Mount Forest.....	134,054.03	12,142.35	.....	146,196.38	.....	.....	.....
Napanee.....	218,899.30	23,173.72	.....	242,073.02	.....	.....	.....
Neustadt.....	22,014.31	1,849.68	.....	23,863.99	.....	.....	.....
Newboro.....	2,347.50	431.70	45.70	2,824.90	.....	.....	.....
Newburgh.....	5,714.22	1,251.93	.....	6,966.15	.....	.....	.....
Newbury.....	14,691.78	1,079.54	.....	15,771.32	.....	.....	.....
Newcastle.....	32,199.92	4,424.99	.....	36,624.91	.....	.....	.....
New Hamburg.....	162,040.78	10,137.61	28.92	172,207.31	31,782.53	1,271.30	334.67
Newmarket.....	155,630.59	28,258.44	539.75	184,428.78	.....	.....	.....
New Toronto.....	1,798,565.25	172,166.92	.....	1,970,732.17	24,100.66	964.03	253.78
Niagara.....	135,081.27	12,623.58	.....	147,704.85	.....	.....	.....
Niagara Falls.....	1,856,331.37	137,976.11	.....	1,994,307.48	29,334.28	1,173.37	308.89
North York Twp.....	2,888,283.64	617,641.74	7,255.01	3,513,180.39	.....	.....	.....
Norwich.....	119,806.30	7,531.78	.....	127,338.08	30,445.39	1,217.82	320.59
Norwood.....	32,754.87	3,586.37	.....	36,341.24	.....	.....	.....
Oakville.....	195,627.93	42,073.38	.....	237,701.31	.....	.....	.....
Oil Springs.....	66,855.10	3,768.03	.....	70,623.13	475.78	19.03	5.01
Omeme.....	18,704.21	2,387.80	176.25	21,268.26	.....	.....	.....
Orangeville.....	191,047.31	19,482.15	.....	210,529.46	.....	.....	.....
Orillia.....	59,253.46	19,535.08	223.18	79,011.72	.....	.....	.....
Orono.....	15,273.42	2,302.41	.....	17,575.83	.....	.....	.....
Oshawa.....	2,897,276.82	331,920.05	32,602.37	3,261,799.24	.....	.....	.....
Ottawa.....	3,420,848.19	641,622.44	26,322.97	4,088,793.60	554.61	22.18	5.84
Otterville.....	32,502.40	2,731.67	.....	35,234.07	270.66	10.83	2.85



**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1958**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Owen Sound.....	953,821.65	81,517.67	.....	1,035,339.32	.....	.....	.....
Paisley.....	41,306.20	3,332.28	.....	44,638.48	.....	.....	.....
Palmerston.....	145,729.19	10,288.95	868.66	155,149.48	1,081.67	43.27	11.39
Paris.....	378,834.99	27,873.61	2,191.03	408,899.63	6,573.60	262.94	69.22
Parkhill.....	72,297.43	6,021.95	.....	78,319.38	.....	.....	.....
Parry Sound.....	40,121.53	8,866.63	.....	48,988.16	.....	.....	.....
Penetanguishene.....	223,529.89	14,110.34	.....	237,640.23	91,433.05	3,657.32	962.79
Perth.....	291,284.64	26,133.56	.....	317,418.20	.....	.....	.....
Peterborough.....	1,934,140.87	218,100.30	4,210.53	2,156,451.70	.....	.....	.....
Petrolia.....	305,468.57	18,980.60	.....	324,449.17	4,215.57	168.62	44.39
Pickering.....	.....	1,591.84	.....	1,591.84	.....	.....	.....
Pictou.....	248,925.41	24,190.19	.....	273,115.60	.....	.....	.....
Plattsville.....	39,970.64	4,156.03	135.85	44,262.52	538.46	21.54	5.67
Point Edward.....	291,895.22	25,084.58	.....	316,979.80	576.45	23.06	6.07
Port Burwell.....	7,444.63	1,223.04	7,445.35	16,113.02	35.14	1.41	.37
Port Colborne.....	466,318.43	40,722.27	2,115.69	509,156.39	.....	.....	.....
Port Credit.....	232,441.30	49,634.86	.....	282,076.16	6,295.35	251.81	66.29
Port Dalhousie.....	151,928.61	12,695.20	.....	164,623.81	.....	.....	.....
Port Dover.....	117,349.69	12,085.14	16.89	129,451.72	.....	.....	.....
Port Elgin.....	81,701.24	8,545.45	.....	90,246.69	.....	.....	.....
Port Hope.....	401,223.29	47,914.47	600.42	449,738.18	.....	.....	.....
Port McNicoll.....	48,049.11	6,111.75	.....	54,160.86	600.19	24.01	6.32
Port Perry.....	78,081.17	7,954.49	.....	86,035.66	.....	.....	.....
Port Rowan.....	27,326.03	2,210.19	.....	29,536.22	.....	.....	.....
Port Stanley.....	146,950.72	9,104.55	65.73	156,121.00	35,834.76	1,433.39	377.34
Prescott.....	218,652.69	22,746.13	.....	241,398.82	.....	.....	.....
Preston.....	862,181.55	63,392.24	4,980.71	930,554.50	83,764.49	3,350.58	882.04
Priceville.....	3,690.63	345.97	.....	4,036.60	.....	.....	.....
Princeton.....	33,169.60	2,336.05	.....	35,505.65	134.85	5.39	1.42
Queenston.....	25,886.27	2,246.97	.....	28,133.24	.....	.....	.....
Renfrew.....	90,361.44	16,491.94	.....	106,853.38	.....	.....	.....
Richmond.....	18,310.06	2,326.22	.....	20,636.28	.....	.....	.....
Richmond Hill.....	148,571.49	36,391.90	4,850.71	189,814.10	.....	.....	.....
Ridgetown.....	143,574.62	11,128.63	269.45	154,972.70	1,566.95	62.68	16.50
Ripley.....	29,840.69	2,426.11	.....	32,266.80	.....	.....	.....
Riverside.....	354,145.03	35,497.46	.....	389,642.49	.....	.....	.....
Rockland.....	9,603.27	3,483.17	.....	13,086.44	.....	.....	.....
Rockwood.....	39,745.50	3,301.93	.....	43,047.43	510.92	20.44	5.38
Rodney.....	48,294.24	4,010.72	.....	52,304.96	318.14	12.73	3.35
Rosseau.....	13,070.14	885.58	.....	13,955.72	.....	.....	.....
Russell.....	20,924.50	1,819.49	.....	22,743.99	.....	.....	.....
St. Catharines.....	3,088,098.95	287,440.58	.....	3,375,539.53	.....	.....	.....
St. Clair Beach.....	28,695.96	3,396.44	.....	32,092.40	.....	.....	.....
St. George.....	46,408.63	3,595.27	.....	50,003.90	544.16	21.77	5.73
St. Jacobs.....	59,662.08	4,461.97	.....	64,124.05	913.58	36.54	9.62

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1958**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
St. Mary's.....	409,813.16	47,618.90	.....	457,432.06	67,900.28	2,716.01	714.99
St. Thomas.....	1,605,579.86	105,115.88	166.33	1,710,862.07	224,596.39	8,983.86	2,365.00
Sandwich East Twp. ....	69,840.70	25,135.05	66,390.85	161,366.60	.....	.....	.....
Sandwich West Twp. ....	101,718.94	38,623.58	72,910.06	213,252.58	.....	.....	.....
Sarnia.....	2,545,953.35	280,911.51	23,218.89	2,850,083.75	13,317.19	532.69	140.23
Scarborough Twp. ....	2,227,577.76	508,849.20	106,764.17	2,843,191.13	.....	.....	.....
Seaforth.....	196,911.03	7,991.99	.....	204,903.02	112,225.07	4,489.00	1,181.73
Shelburne.....	75,785.24	6,591.93	437.58	81,939.59	.....	.....	.....
Simcoe.....	454,536.93	45,177.92	2,835.89	502,550.74	1,662.87	66.51	17.51
Smith's Falls.....	454,709.43	43,123.00	781.71	498,614.14	.....	.....	.....
Smithville.....	26,470.89	3,173.79	.....	29,644.68	.....	.....	.....
Southampton.....	78,125.11	7,964.33	.....	86,089.44	.....	.....	.....
Springfield.....	27,885.13	1,923.08	.....	29,808.21	312.44	12.50	3.29
Stamford Twp.....	553,460.11	78,151.39	.....	631,611.50	5,223.17	208.93	55.00
Stayner.....	68,535.40	6,726.53	.....	75,261.93	2,477.68	99.11	26.09
Stirling.....	47,475.26	4,853.28	.....	52,328.54	.....	.....	.....
Stoney Creek.....	57,710.12	15,517.15	.....	73,227.27	.....	.....	.....
Stouffville.....	87,634.09	10,606.87	.....	98,240.96	.....	.....	.....
Stratford.....	1,830,663.93	121,143.93	142.44	1,951,950.30	180,415.95	7,216.64	1,899.78
Strathroy.....	312,299.03	24,882.51	.....	337,181.54	3,818.61	152.74	40.21
Streetsville.....	61,708.80	13,303.65	.....	75,012.45	.....	.....	.....
Sunderland.....	35,477.88	3,028.02	.....	38,505.90	.....	.....	.....
Sundridge.....	5,505.68	1,638.92	.....	7,144.60	.....	.....	.....
Sutton.....	76,495.54	7,552.36	32.44	84,080.34	.....	.....	.....
Swansea.....	401,042.01	37,503.08	.....	438,545.09	.....	.....	.....
Tara.....	31,566.78	2,687.76	.....	34,254.54	.....	.....	.....
Tavistock.....	146,637.45	9,111.18	.....	155,748.63	2,891.74	115.67	30.45
Tecumseh.....	108,441.95	9,337.92	.....	117,779.87	.....	.....	.....
Teeswater.....	47,340.25	4,377.90	.....	51,718.15	.....	.....	.....
Thamesford.....	59,528.83	4,739.95	.....	64,268.78	762.58	30.50	8.03
Thamesville.....	64,576.20	5,348.61	.....	69,924.81	476.73	19.07	5.02
Thedford.....	37,172.37	3,167.14	.....	40,339.51	.....	.....	.....
Thornbury.....	16,467.28	2,958.92	.....	19,426.20	.....	.....	.....
Thorndale.....	28,490.26	2,014.56	.....	30,504.82	622.03	24.88	6.55
Thornton.....	11,481.78	921.07	.....	12,402.85	.....	.....	.....
Thorold.....	512,746.66	62,701.93	.....	575,448.59	.....	.....	.....
Tilbury.....	193,977.07	12,925.91	.....	206,902.98	869.90	34.80	9.16
Tillsonburg.....	331,203.65	25,413.28	.....	356,616.93	80,594.49	3,223.78	848.66
Toronto.....	63,895,784.20	4,627,956.57	.....	68,523,740.77	3,555,634.38	142,225.38	37,440.83
Toronto Twp.....	1,042,952.88	241,888.09	.....	1,284,840.97	1,750.24	70.01	18.43
Tottenham.....	37,703.90	3,038.18	.....	40,742.08	74.07	2.96	.78
Trafalgar Twp.....	155,028.94	53,073.09	.....	208,102.03	.....	.....	.....
Trenton.....	576,203.32	81,651.85	.....	657,855.17	.....	.....	.....
Tweed.....	58,928.44	6,150.75	.....	65,079.19	.....	.....	.....
Uxbridge.....	88,259.92	9,755.90	.....	98,015.82	.....	.....	.....

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1958**  
**(concluded)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund January 1, 1958	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1958	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1958		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Vankleek Hill.....	6,866.00	2,328.42	.....	9,194.42	.....	.....	.....
Victoria Harbour.....	24,315.90	2,190.11	.....	26,506.01	792.02	31.68	8.34
Walkerton.....	136,867.84	15,313.45	.....	152,181.29	.....	.....	.....
Wallaceburg.....	813,690.02	64,561.11	.....	878,251.13	6,265.91	250.64	65.98
Wardsville.....	14,924.42	1,316.28	.....	16,240.70	.....	.....	.....
Warkworth.....	17,741.99	1,651.90	.....	19,393.89	.....	.....	.....
Wasaga Beach.....	10,625.92	3,063.16	.....	13,689.08	.....	.....	.....
Waterdown.....	76,954.87	6,244.20	.....	83,199.07	14,617.28	584.69	153.92
Waterford.....	106,817.07	7,919.21	.....	114,736.28	1,320.04	52.80	13.90
Waterloo.....	1,042,054.54	87,814.03	1,527.50	1,131,396.07	75,370.37	3,014.81	793.65
Watford.....	94,084.30	8,235.76	.....	102,320.06	602.09	24.08	6.34
Waubaushene.....	20,893.59	2,037.78	.....	22,931.37	577.40	23.10	6.08
Welland.....	1,279,454.28	97,967.78	1,294.50	1,378,716.56	70,649.57	2,825.98	743.94
Wellesley.....	49,048.30	3,514.63	.....	52,562.93	1,584.05	63.36	16.68
Wellington.....	46,672.94	4,179.67	.....	50,852.61	.....	.....	.....
West Lorne.....	97,326.45	8,300.84	.....	105,627.29	329.53	13.18	3.47
Weston.....	858,166.01	63,296.97	.....	921,462.98	78,150.05	3,126.00	822.92
Westport.....	24,885.26	2,370.07	.....	27,255.33	.....	.....	.....
Wheatley.....	61,661.62	5,854.87	.....	67,516.49	.....	.....	.....
Whitby.....	293,574.07	47,582.97	2,749.46	343,906.50	.....	.....	.....
Wiarton.....	78,043.25	8,102.31	.....	86,145.56	.....	.....	.....
Williamsburg.....	22,063.14	1,882.70	.....	23,945.84	.....	.....	.....
Winchester.....	81,623.87	7,939.03	.....	89,562.90	.....	.....	.....
Windermere.....	11,357.56	929.46	.....	12,287.02	.....	.....	.....
Windsor.....	10,324,431.26	706,138.48	.....	11,030,569.74	50,120.61	2,004.82	527.77
Wingham.....	162,054.10	14,660.39	.....	176,714.49	.....	.....	.....
Woodbridge.....	151,384.03	14,250.54	.....	165,634.57	1,170.94	46.84	12.33
Woodstock.....	1,488,376.90	119,223.25	4,811.98	1,612,412.13	94,615.38	3,784.62	996.30
Woodville.....	30,075.59	2,126.26	.....	32,201.85	.....	.....	.....
Wyoming.....	31,942.07	2,791.14	.....	34,733.21	323.84	12.95	3.41
York Twp.....	3,435,586.27	363,128.23	.....	3,798,714.50	.....	.....	.....
Zurich.....	44,686.03	3,305.53	.....	47,991.56	627.73	25.11	6.61
Total—Municipalities....	198,640,348.50	18,218,873.31	622,766.61	217,481,988.42	7,890,072.15	315,602.93	83,082.46
Rural Power District....	32,972,207.63	4,375,602.54	622,766.61	36,725,043.56	.....	.....	.....
Administrative and service buildings and equipment	2,984,348.77	303,146.25	.....	3,287,495.02	802,171.00	32,086.84	8,446.86
GRAND TOTAL.....	234,596,904.90	22,897,622.10 (See note)	.....	257,494,527.00	8,692,243.15	347,689.77	91,529.32

NOTE: the net provision and interest credited during the year consist of the following amounts shown in the statement of sinking fund reserve:

Interest.....	\$ 9,383,876.19
Provision—direct.....	13,728,659.00
—indirect.....	224,306.00

Less credits resulting from matured sinking funds.....

\$23,336,841.19

439,219.09

\$22,897,622.10



NORTHERN ONTARIO

FIXED

Statement Showing Changes During

In

Property	Changes		
	Balance January 1, 1958	Placed in service	Equipment relocated and reclassified
<b>Power System</b>	\$	\$	\$
<b>HYDRO-ELECTRIC GENERATING STATIONS</b>			
<b>NORTHEASTERN DIVISION</b>			
Abitibi River			
Abitibi Canyon.....	19,260,579	10,929	5,326
Otter Rapids.....	.....	.....	.....
Mississagi River			
George W. Rayner.....	18,495,307	14,578	.....
Red Rock Falls.....	22,199,229	1,014,014	28,498
Other Properties.....	59,955,115	1,039,521	33,824
<b>NORTHWESTERN DIVISION</b>			
Nipigon River			
Pine Portage.....	31,969,582	2,283	.....
Cameron Falls.....	10,496,133	4,956,356	.....
Alexander.....	7,730,906	3,697,233	.....
Aguasabon River			
Aguasabon.....	12,665,198	3,953	.....
English River			
Caribou Falls.....	.....	23,233,035	.....
Manitou Falls.....	13,611,227	1,738,000	.....
Winnipeg River			
Whitedog Falls.....	.....	20,885,635	30,000
Kaministiquia River			
Silver Falls.....	10,809,446	400,732	30,000
Other properties.....	87,282,492	54,917,227	.....
<b>THERMAL-ELECTRIC GENERATING STATIONS</b>			
<b>NORTHEASTERN DIVISION</b> .....	380,751	.....	.....
<b>NORTHWESTERN DIVISION</b>			
Thunder Bay.....	.....	.....	.....
	380,751	.....	.....
Total generating stations.....	147,618,358	55,956,748	33,824
<b>TRANSFORMER STATIONS</b>			
Northeastern Division.....	18,356,049	4,805,330	80,948
Northwestern Division.....	7,658,557	1,791,443	69,419
Total transformer stations.....	26,014,606	6,596,773	11,529
<b>TRANSMISSION LINES</b>			
Northeastern Division.....	26,726,907	6,734,680	.....
Northwestern Division.....	27,622,284	2,162,767	29,280
Total transmission lines.....	54,349,191	8,897,447	29,280
<b>LOCAL SYSTEMS</b>			
Northeastern Division.....	3,138,975	187,180	99,074
Northwestern Division.....	521,906	63,266	16,810
Total local systems.....	3,660,881	250,446	115,884
<b>COMMUNICATIONS</b> .....	3,590,514	225,810	.....
Total power system.....	235,233,550	71,927,224	99,811

## PROPERTIES

## ASSETS

## Year 1958 and Balances at December 31, 1958

service		Under construction December 31, 1958	Total fixed assets December 31, 1958	Expenditure during 1958
during year	Balance December 31, 1958			
Sales and retirements				
\$	\$	\$	\$	\$
3,161	19,263,021	1,001,931	20,264,952	800,042
.....	.....	3,044,042	3,044,042	3,044,042
4,386	18,505,499	18,464	18,523,963	15,353
.....	.....	3,738,053	3,738,053	3,738,053
11,296	23,173,449	464,213	23,637,662	984,344
18,843	60,941,969	8,266,703	69,208,672	8,581,834
1,195	31,970,670	276	31,970,946	388
6,563	15,445,926	10,222	15,456,148	1,922,552
7,172	11,435,311	14,091	11,449,402	631,981
1,650	12,667,501	3,347	12,670,848	615
.....	23,233,035	49,710	23,282,745	6,978,693
.....	15,349,227	155,407	15,504,634	557,078
.....	20,915,635	337,961	21,253,596	2,309,668
.....	.....	11,445,025	11,445,025	6,715,215
5,166	11,175,012	135,065	11,310,077	158,420
7,402	142,192,317	12,151,104	154,343,421	19,274,610
.....	380,751	.....	380,751	.....
.....	.....	3,808,899	3,808,899	3,568,645
.....	380,751	3,808,899	4,189,650	3,568,645
26,245	203,515,037	24,226,706	227,741,743	31,425,089
181,603	22,898,828	791,457	23,690,285	3,592,800
24,226	9,495,193	400,959	9,896,152	1,491,214
205,829	32,394,021	1,192,416	33,586,437	5,084,014
152,783	33,308,804	359,326	33,668,130	3,300,434
310,135	29,504,196	1,153,832	30,658,028	2,184,256
462,918	62,813,000	1,513,158	64,326,158	5,484,690
54,672	3,370,557	153,838	3,524,395	239,842
6,588	595,394	23,838	619,232	81,933
61,260	3,965,951	177,676	4,143,627	321,775
111,861	3,704,463	236,818	3,941,281	208,378
868,113	306,392,472	27,346,774	333,739,246	42,523,946

NORTHERN ONTARIO

FIXED

Statement Showing Changes During

Property	In		
	Balance January 1, 1958	Changes	
		Placed in service	Equipment relocated and reclassified
<b>Administrative and Service Buildings and Equipment</b>	\$	\$	\$
BUILDINGS . . . . .	1,573,081	341,229	68,239
OFFICE AND SERVICE EQUIPMENT . . . . .	623,566	76,328	.....
Total administrative and service buildings and equipment . . . . .	2,196,647	417,557	68,239
<b>Rural Power District</b>	32,893,954	3,441,898	168,050
Total fixed assets . . . . .	270,324,151	75,786,679	.....

Changes in Assets Under Construction During 1958

Under construction at January 1, 1958 . . . . .	\$ 57,309,911
Expenditures during 1958 . . . . .	46,307,056
	\$ 103,616,967
Less—Placed in service during 1958 . . . . .	75,786,679
Under construction at December 31, 1958 . . . . .	\$ 27,830,288



PROPERTIES

ASSETS

Year 1958 and Balances at December 31, 1958

service				
during year				
Sales and retirements	Balance December 31, 1958	Under construction December 31, 1958	Total fixed assets December 31, 1958	Expenditure during 1958
\$	\$	\$	\$	\$
9,121	1,973,428	201,317	2,174,745	358,949
18,095	681,799	.....	681,799	76,328
27,216	2,655,227	201,317	2,856,544	435,277
214,044	35,953,758	282,197	36,235,955	3,347,833
1,109,373	345,001,457	27,830,288	372,831,745	46,307,056

Summary of Sales and Retirements During 1958

Charged to frequency standardization.....	\$ 66,926
Charged to accumulated depreciation.....	931,838
Proceeds from sales.....	110,609
	<u>\$ 1,109,373</u>

## NORTHERN ONTARIO

## Accumulated Depreciation

December 31, 1958

	Power System	Rural Power District	Administrative and service buildings and equipment	Total
	\$	\$	\$	\$
Balances at January 1, 1958. .	31,903,776	4,432,347	434,947	36,771,070
Add:				
Interest at 3% per annum on accumulated depreciation required on plant not fully depreciated. . . . .	835,984	157,640	6,860	1,000,484
Provision in the year charged to operations				
—direct. . . . .	2,409,294	964,801		3,374,095
—indirect. . . . .			78,252	78,252
Special allowance charged to Surplus (Note) . . . . .		761,515		761,515
Accumulated depreciation on assets purchased from the Southern Ontario System.	303,157	1,159		304,316
Salvage recoveries less re- moval costs of assets retired. . . . .	145,452	63,437	8,093	90,108
Adjustments re transfer of equipment. . . . .	22,226	14,972	37,198	
Deduct:	35,284,533	6,365,927	549,164	42,199,624
Cost of fixed assets retired less proceeds from sales . .	735,038	197,827	1,027	931,838
Balances at December 31, 1958	34,549,495	6,168,100	550,191	41,267,786

NOTE—The special allowance of \$761,515 is required to reflect, as at January 1, 1958, a reduction in the life expectancy of Rural Power District distribution and other facilities indicated by a study of retirement experience completed during the year. The regular provision for 1958 is based on revised rates determined from this study.

## Exchange Discount and Premium on Funded Debt, December 31, 1958

	Discount	Premium
	\$	\$
Exchange discount and premium on funded debt issued in United States funds:		
Balances at January 1, 1958. . . . .	196,476	177,099
Less discount and premium on bonds redeemed during year 1958. . .	32,383	610
Balances at December 31, 1958. . . . .	164,093	176,489

## Frequency Standardization Account, December 31, 1958

	\$	\$
Balance at credit at January 1, 1958. . . . .		283,710
Expenditures for frequency standardization work completed during year.	4,352,680	
Less industrial customers' contributions. . . . .	45,758	
	4,306,922	
Less portion of cost charged to cost of power for the year. . . . .	283,572	4,023,350
Balance at debit at December 31, 1958. . . . .		3,739,640

## PROPERTIES

## Reserve for Stabilization of Rates and Contingencies, December 31, 1958

	Power System	Rural Power District	Sub-total	Nuclear research	Total
	\$	\$	\$	\$	\$
Balances at January 1, 1958.....	18,128,345	297,456	18,425,801	.....	18,425,801
Add:					
Interest for year on reserve balances (Note 1).....	667,151	10,882	678,033	.....	678,033
Provision in the year.....	829,732	.....	829,732	563,707	1,393,439
Profit on redemption of funded debt and sale of investments, net	152,703	.....	152,703	.....	152,703
	19,777,931	308,338	20,086,269	563,707	20,649,976
Deduct:					
Expenditure during year.....	.....	.....	.....	141,660	141,660
Withdrawal in the year applied in reduction of cost of power to Thunder Bay cost-contract municipalities in the North- western Division.....	72,395	.....	72,395	.....	72,395
Balances at December 31, 1958 (Note 2).....	19,705,536	308,338	20,013,874	422,047	20,435,921

NOTE 1—Interest for the year on the reserve balances was credited at 3.57% for the period January to August and 3.91% for the period September to December, 1958, which approximated the actual earnings on the investments held for these reserves.

NOTE 2—The balance of \$19,705,536 at the credit of the Power System reserve at December 31, 1958 includes an amount of \$2,316,274 held specifically for the benefit of those municipalities in the Northwestern Division which were supplied with power at cost in the former Thunder Bay System at January 1, 1952, the date on which that system was merged with the Northern Ontario Properties.

## Sinking Fund Reserve, December 31, 1958

	Province of Ontario			Municipali- ties supplied with power at cost	
	40-year basis	Prepaid sinking funds	Total	40-year basis	Total
	\$	\$	\$	\$	\$
Balances at January 1, 1958...	28,804,641	13,275,423	42,080,064	11,606,195	53,686,259
Add:					
Interest at 4% per annum on reserve balances.....	1,152,186	531,017	1,683,203	464,247	2,147,450
Provision in the year					
—direct.....	2,785,569	.....	2,785,569	305,048	3,090,617
—indirect.....	19,799	.....	19,799	.....	19,799
	32,762,195	13,806,440	46,568,635	12,375,490	58,944,125
Deduct credits resulting from prepaid and matured sink- ing funds (see note):					
Interest.....	15,454	531,017	546,471	.....	546,471
Principal.....	4,069	171,189	175,258	.....	175,258
	19,523	702,206	721,729	.....	721,729
Balances at December 31, 1958	32,742,672	13,104,234	45,846,906	12,375,490	58,222,396

NOTE: The matured sinking funds at January 1, 1958 amounted to \$386,361.



# NORTHERN ONTARIO

## STATEMENT OF THE ALLOCATION

### for the Year

Municipalities supplied with power at cost	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads (Note 1)	Energy	Power purchased, operating costs, and net fixed charges (Note 2)	Frequency standardi- zation (Note 3)	Provision for stabilization of rates and contingencies (Note 4)
	kw	megawatt hours	\$	\$	\$
Atikokan Twp.....	3,342.2	17,367.0	131,894.19	.....	5,421.49
Dryden.....	1,926.2	12,155.6	79,658.45	.....	3,240.81
Fort William.....	30,995.6	194,263.8	1,015,079.78	.....	52,077.33
Nipigon Twp.....	1,414.9	7,552.0	42,500.12	.....	2,305.97
Port Arthur.....	37,099.7	186,121.9	1,120,126.36	.....	59,819.87
Red Rock.....	766.3	3,898.8	22,445.71	.....	1,238.53
Schreiber Twp.....	987.6	5,301.6	28,103.09	.....	1,611.21
Terrace Bay.....	1,131.3	6,939.2	32,958.67	.....	1,892.57
Total—Municipalities.....	77,663.8	433,599.9	2,472,766.37	.....	127,607.78
Province of Ontario					
Rural Power District.....	56,005.4	297,191.7	5,685,790.08	28,002.70	89,868.32
Other customers.....	696,063.1	4,461,287.1	24,924,569.94	348,032.05	1,175,962.90
Secondary customers.....		202,473.5	.....	.....	.....
Total—Province of Ontario.....	752,068.5	4,960,952.3	30,610,360.02	376,034.75	1,265,831.22
GRAND TOTAL.....	829,732.3	5,394,552.2	33,083,126.39	376,034.75	1,393,439.00

### Notes on Allocation of Cost of Power

#### NORTHERN ONTARIO PROPERTIES

1. The average monthly peak load supplied in the year represents primary power only. Secondary energy appears separately on the above statement.

2. The total of \$33,083,126 shown under the heading "Power purchased, operating costs and net fixed charges" includes the following items of cost shown in the Statement of Operations:

Cost of power purchased.....	\$ 607,086
Operation, maintenance and administrative expenses.....	12,743,808
Interest.....	10,944,303
Depreciation.....	3,374,095
Sinking fund provision.....	3,090,617
Interchange of power with Southern Ontario System.....	3,509,062
Sale of secondary energy.....	464,116
Credit resulting from prepaid and matured sinking funds.....	721,729
	<u>\$ 33,083,126</u>

The method used in 1957 of allocating the cost of power supplied to each customer was followed in 1958. However, in the Northwestern Division bulk transmission costs which apply only to the Patricia and Rainy River Districts were pooled in 1958, while in 1957 only a portion of such costs were pooled, the balance being costed separately for each District.

Interchange of power, \$3,509,062, represents the cost of 1,099,669 megawatt-hours of energy transferred from the Southern Ontario System.

Revenue from the sale of secondary energy, \$464,116, and related costs \$161,484, have in 1958 been taken into account in determining the cost of power, and costs to all customers have accordingly been reduced by the net revenue of \$302,632. In 1957 and prior years such revenue and the related costs were included in amounts billed and costs allocated to other customers served for the account of the Province of Ontario. The net revenue from the sale of secondary energy in 1958 was as follows:

	Paper Companies	Other Customers	Total
Gross revenue.....	\$232,447	\$231,669	\$464,116
Less costs related thereto.....	43,491	117,993	161,484
Net revenue.....	<u>\$188,956</u>	<u>\$113,676</u>	<u>\$302,632</u>

The credit of \$721,729 resulting from prepaid and matured sinking funds consists of a principal amount of \$175,258 and interest at 4 per cent amounting to \$546,471 applicable to prepaid and matured sinking funds aggregating \$13,661,785 at the beginning of the year.

## PROPERTIES

## OF THE COST OF POWER

ended December 31, 1958

power		Amounts billed (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Withdrawal from stabilization of rates reserve (Note 5)	Total cost of power			Interim	Actual
\$	\$	\$	\$	\$	\$
.....	137,315.68	133,687.00	3,628.68	40.00	41.09
.....	82,899.26	82,828.38	70.88	43.00	43.04
30,995.60	1,036,161.51	1,038,353.43	2,191.92	33.50	33.43
1,414.90	43,391.19	48,814.62	5,423.43	34.50	30.67
37,099.70	1,142,846.53	1,168,638.97	25,792.44	31.50	30.80
766.30	22,917.94	24,599.32	1,681.38	32.10	29.91
987.60	28,726.70	32,591.35	3,864.65	33.00	29.09
1,131.30	33,719.94	37,333.74	3,613.80	33.00	29.81
72,395.40	2,527,978.75	2,566,846.81	38,868.06	.....	.....
.....	5,803,661.10	5,577,341.00	226,320.10	.....	.....
.....	26,448,564.89	27,109,678.74	661,113.85	.....	.....
.....	32,252,225.99	32,687,019.74	434,793.75	.....	.....
72,395.40	34,780,204.74	35,253,866.55	473,661.81	.....	.....

3. Frequency standardization costs are shown in the Statement of Operations as follows:

Interest.....	\$ 92,463
Portion of cost written off.....	283,572
	<u>\$376,035</u>

This represents a charge of 50 cents per kilowatt on the average monthly peak load supplied to all customers served on behalf of the Province of Ontario.

4. The provision for stabilization of rates and contingencies consists of:

General provision.....	\$ 829,732
Provision for nuclear research.....	563,707
	<u>\$1,393,439</u>

The general provision represents a charge of \$1.00 per kilowatt on the average monthly peak load supplied to all customers.

The provision for nuclear research was charged to all customers on the basis of 50 per cent on the quantity of energy supplied and 50 per cent on average monthly peak loads. It represents the Northern Ontario Properties' share of a total provision of \$3,000,000 charged to the Southern Ontario System and the Northern Ontario Properties in proportion to their average monthly peak loads.

5. The withdrawal from the stabilization of rates reserve of \$72,395 represents \$1 per kilowatt on the average monthly peak load of cost-contract municipalities in the Northwestern Division formerly served by the Thunder Bay System. This withdrawal was credited to these municipalities and charged against that portion of the reserve held specifically for them.

NORTHERN ONTARIO PROPERTIES

STATEMENT OF SINKING FUND EQUITY

as at December 31, 1958

Municipality	Net amount paid as part of cost of power by each municipality and other sinking funds provided out of revenues of the system and interest allowed		
	Balance at January 1, 1958	Net provision and interest credited during year	Balance at December 31, 1958
	\$	\$	\$
Atikokan Twp.....	20,791.52	15,724.42	36,515.94
Dryden.....	36,701.97	10,531.11	47,233.08
Fort William.....	3,940,915.16	284,711.52	4,225,626.68
Nipigon Twp.....	71,553.34	8,040.27	79,593.61
Port Arthur.....	7,424,818.75	435,612.74	7,860,431.49
Red Rock.....	25,582.19	3,492.00	29,074.19
Schreiber Twp.....	31,141.96	4,775.40	35,917.36
Terrace Bay.....	54,689.57	6,407.95	61,097.52
Total—Municipalities ..	11,606,194.46	769,295.41	12,375,489.87
Province of Ontario.....	42,080,064.23	3,766,841.61	45,846,905.84
GRAND TOTAL.....	53,686,258.69	4,536,137.02 (See note)	58,222,395.71

NOTE: The net provision and interest credited during the year consist of the following amounts shown in the statement of the sinking fund reserve:

Interest.....	\$2,147,450.35
Provision—direct.....	3,090,617.00
—indirect.....	19,799.00
	\$5,257,866.35
Less credits resulting from prepaid and matured sinking funds....	721,729.33
	<u>\$4,536,137.02</u>



## APPENDIX III—RURAL

**P**OWER is delivered in wholesale quantities by the Commission to 103 rural operating areas in the Rural Power District. Within the areas, retail customers are supplied under the following six classes of service: farm, hamlet residential, rural residential, commercial, summer, and industrial power. The description of these classes of service and the rates applicable to them at December 31, 1958 are included in this appendix.

### **Description of Main Classes of Service**

Farm service means service rendered to a property used for the production of food or industrial crops. It provides for the electrical supply of all farm buildings and equipment located on a farm and used for farm purposes, including equipment required for processing the products of that farm. Service may be supplied under one farm contract to all dwellings or separate domestic establishments located on the farm and occupied by persons engaged in its operation. Additional dwellings or domestic establishments located on a farm property and occupied by persons otherwise engaged are classed as residential service. Small properties of thirty acres and less are classified as residential service unless special circumstances warrant a classification as farm service.

Hamlet residential service is applicable to all domestic establishments in built-up areas where there are six or more customers in any quarter-mile section of road or street.

Rural residential service is applicable to isolated domestic establishments served as part of a rural operating area.

Commercial service applies to a wide variety of business or community establishments such as hotels, offices, stores, churches, schools, or small manufacturing and processing plants. Sign and display lighting is included.

Summer service is applicable to residential properties normally used only during the summer months.

Industrial power service is 3-phase service to such power users as creameries, cheese factories, chopping mills and other industrial establishments.

## Rural Power District

## INVESTMENT IN FIXED ASSETS AT COST AS AT DECEMBER 31, 1958

System and Region	1957	1958	Net increase or decrease
	\$	\$	\$
<b>SOUTHERN ONTARIO SYSTEM</b>			
Western.....	35,519,307	37,503,542	1,984,235
West Central.....	31,066,719	30,663,985	402,734
Niagara.....	3,235,610	9,777,200	541,590
Toronto.....	13,227,800	14,139,167	911,367
Georgian Bay.....	40,609,102	43,787,932	3,178,830
East Central.....	33,249,800	35,962,253	2,712,453
Eastern.....	28,752,937	30,838,513	2,085,576
Total.....	191,661,275	202,672,592	11,011,317
<b>NORTHERN ONTARIO PROPERTIES</b>			
Northeastern.....	23,488,964	25,674,525	2,185,561
Northwestern.....	9,781,252	10,561,430	780,178
Total.....	33,270,216	36,235,955	2,965,739
Total—All systems.....	224,931,491	238,908,547	13,977,056
Provincial assistance.....	112,084,337	113,538,494	1,454,157

## Rural Rate Structure

Rural rates in effect throughout the Province are given in the accompanying tables. They are quoted on a monthly basis, except for summer service, which is quoted on an annual basis. Each contract within each class of service has a rating and the energy used is billed on the basis of a three-step energy rate, except hamlet residential service which has a four-step energy rate, the bill being subject to a monthly minimum, or with respect to summer service, to an annual fixed charge. The number of kilowatt-hours billed at the first and second energy rates and the amount of the minimum monthly bill, or the annual fixed charge, depend on the contract rating. For all contracts with a demand rating (FD, HD, RD, CD, SD, and Industrial Power) these aspects of the bill are based on measured demand and are subject to minima related to demands established in previous billing periods.

For industrial power service there are eight different schedules and these are numbered in the following table. The alphabetical list of the 103 rural operating areas on page 174 indicates the schedule number of the power service rate applicable to each area, as at December 31, 1958.

## Rural Power District

## RATES AND TYPICAL BILLS FOR ELECTRICAL SERVICE

as at December 31, 1958

Rates are quoted on a monthly basis for all services except summer service, which are quoted on an annual basis. All are subject to 10% prompt payment discount.

Class and rating	Number of kilowatt-hours per month billed at uniform kwh rate shown				Minimum bill per month (gross)	Net monthly bill for		
	4.5¢	2.6¢	1.1¢	1.5¢		100 kwh	300 kwh	500 kwh
<b>Farm</b>					\$	\$	\$	\$
F35.....	60	180	.....	All additional	2.25	3.37	7.45	10.15
F50.....	100	300	.....	"	3.75	4.05	8.73	12.42
FD.....	10*	30*	.....	"	.40*	.....	8.73†	12.42†
<b>Hamlet Residential</b>								
H20.....	60	80	500	All additional	1.67	3.37	5.89	7.87
H35.....	60	180	500	"	2.25	3.37	7.24	9.22
H50.....	80	300	500	"	3.75	3.71	8.39	11.45
HD.....	10*	30*	500	"	.40*	.....	8.73†	12.06†
<b>Rural Residential</b>								
R20.....	60	80	.....	All additional	1.67	3.37	6.46	9.16
R35.....	60	180	.....	"	2.25	3.37	7.45	10.15
R50.....	80	300	.....	"	3.75	3.71	8.39	11.88
RD.....	10*	30*	.....	"	.40*	.....	8.73†	12.42†
<b>Commercial</b>								
C20.....	60	120	.....	All additional	1.50	3.37	6.86	9.56
C35.....	90	180	.....	"	2.25	3.88	8.26	10.96
C50.....	150	300	.....	"	3.75	4.05	9.58	13.77
CD.....	15*	30*	.....	"	.40*	.....	9.58†	13.77†
<b>Summer</b>								
S20.....	150\$	450\$	.....	All additional	16.67‡	4.05\$	9.58\$	14.26\$
S35.....	225\$	675\$	.....	"	22.22‡	4.05\$	10.87\$	15.55\$
S50.....	375\$	1,125\$	.....	"	25.00‡	4.05\$	12.15\$	18.12\$
SD.....	40\$*	120\$*	.....	"	2.50*‡	.....	12.15\$†	18.54\$†

\* On annual basis

‡ Gross annual fixed charge

\* Per kw of demand

† Calculated on basis of minimum demand of 10 kw

## Industrial Power

Schedule	No. of kwh in first block	No. of kwh in second block	Demand rate per kw	Energy rate per kwh for			Net monthly bill for use of 1 kw of demand		
				First block of kwh	Second block of kwh	All additional kwh	100 hours	200 hours	300 hours
			\$	¢	¢	¢	\$	\$	\$
1.....	50*	50*	1.35	2.3	1.5	0.33	2.92	3.22	3.52
2.....	50*	50*	1.35	2.6	1.7	0.33	3.15	3.45	3.74
3.....	50*	50*	1.35	2.8	1.8	0.33	3.28	3.58	3.88
4.....	50*	50*	1.35	3.1	2.0	0.33	3.51	3.81	4.10
5.....	50*	50*	1.35	3.4	2.2	0.33	3.73	4.03	4.33
6.....	50*	50*	1.35	3.7	2.4	0.33	3.96	4.26	4.55
7.....	50*	50*	1.35	4.0	2.6	0.33	4.18	4.48	4.78
8.....	50*	50*	1.35	4.6	3.0	0.33	4.63	4.93	5.23

\* per kw of demand



# Rural Operating Areas and Industrial Power Service Schedules in Effect

Rural operating area	Schedule	Rural operating area	Schedule	Rural operating area	Schedule
Algoma.....	8	Harrow.....	6	Peterborough.....	1
Alliston.....	5	Huntsville.....	5	Pictou.....	5
Arnprior.....	4	Ingersoll.....	4	Plantagenet.....	4
Aylmer.....	5	Kapuskasing.....	6	Port Arthur.....	5
Bala.....	4	Kenora.....	8	Richmond Hill.....	4
Bancroft.....	7	Kingston.....	4	Ridgetown.....	6
Barrie.....	5	Kingsville.....	5	St. Catharines.....	3
Beamsville.....	4	Kirkland Lake.....	6	St. Thomas.....	5
Belleville.....	4	Kitchener.....	4	Sarnia.....	5
Blenheim.....	5	Lakefield.....	4	Shelburne.....	5
Bowmanville.....	4	Lancaster.....	4	Simcoe.....	4
Bracebridge.....	4	Listowel.....	4	Sioux Lookout.....	8
Brampton.....	4	London.....	4	Stayner.....	4
Brantford.....	4	Lucan.....	5	Stoney Creek.....	2
Brockville.....	4	Manitoulin.....	8	Caledonia Section.....	4
Cannington.....	5	Markdale.....	4	Stratford.....	4
Cayuga.....	6	Markham.....	4	Strathroy.....	5
Chatham.....	4	Matheson.....	6	Sudbury.....	6
Clinton.....	5	Merlin.....	6	Sutton.....	5
Cobden.....	4	Merrickville.....	4	Terrace Bay.....	7
Cobourg.....	4	Minden.....	6	Tillsonburg.....	4
Delta.....	4	Mitchell.....	5	Tweed.....	5
Dorchester.....	5	Napanee.....	4	Uxbridge.....	5
Dryden.....	8	New Liskeard.....	6	Vankleek Hill.....	4
Dundas.....	4	North Bay.....	6	Walkerton.....	5
Dunnville.....	5	Norwood.....	5	Wallaceburg.....	5
Elmira.....	4	Oil Springs.....	6	Warren.....	6
Essex.....	6	Orangeville.....	6	Welland.....	1
Exeter.....	5	Orillia.....	3	West Lorne.....	6
Fenelon Falls.....	5	Oshawa.....	4	Winchester.....	4
Forest.....	6	Ottawa.....	2	Windsor.....	4
Fort Frances.....	8	Owen Sound.....	5	Wingham.....	5
Frankford.....	4	Parry Sound.....	5	Woodbridge.....	5
Geraldton.....	8	Penetanguishene.....	5	Woodstock.....	4
Guelph.....	4	Perth.....	4		

**Rural Power District**  
**MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1958**

Rural operating areas by regions	Miles of primary line	Number of customers							
		Farm	Residential		Com- mercial	Summer		Power	Total
			Rural	Hamlet		Com- mercial	Other		
SOUTHERN ONTARIO SYSTEM									
WESTERN									
Aylmer.....	336.38	1,587	188	943	226	10	135	7	3,096
Blenheim.....	141.40	658	137	395	114	14	240	9	1,567
Chatham.....	331.25	1,415	328	2,552	338	.....	.....	39	4,672
Dorchester.....	207.04	849	161	680	164	.....	2	15	1,871
Essex.....	305.76	1,535	164	1,272	192	12	646	20	3,841
Exeter.....	273.26	1,195	51	326	133	12	476	12	2,205
Forest.....	337.27	1,391	73	218	138	39	940	6	2,805
Harrow.....	248.55	1,388	103	1,187	172	23	1,463	20	4,356
Ingersoll.....	300.83	1,063	101	404	104	2	27	3	1,704
Kingsville.....	291.09	1,847	101	1,534	284	66	1,259	42	5,133
London.....	392.71	1,183	183	12,913	896	.....	28	128	15,331
Lucan.....	377.64	1,435	67	156	113	.....	.....	5	1,776
Merlin.....	394.91	1,644	174	408	234	4	380	18	2,862
Oil Springs.....	360.22	1,475	58	244	197	.....	.....	26	2,000
Ridgetown.....	369.01	1,411	160	451	188	24	638	9	2,881
St. Thomas.....	314.46	1,234	232	1,835	267	.....	10	11	3,589
Sarnia.....	286.26	1,192	135	2,401	335	8	515	10	4,596
Strathroy.....	516.98	1,958	206	643	265	.....	.....	9	3,081
Tillsonburg.....	461.65	1,949	351	1,030	307	.....	.....	27	3,664
Wallaceburg....	463.12	1,791	280	1,245	328	1	347	20	4,012
West Lorne.....	498.97	1,807	103	260	200	.....	59	12	2,441
Windsor.....	71.88	275	66	767	100	.....	.....	10	1,218
Woodstock.....	226.53	895	73	749	166	.....	.....	13	1,896
Total.....	7,507.17	31,177	3,495	32,613	5,461	215	7,165	471	80,597
WEST CENTRAL									
Brantford.....	555.59	2,225	420	795	311	4	13	5	3,773
Cayuga.....	526.93	1,967	265	771	274	20	1,413	26	4,736
Clinton.....	662.04	2,535	112	808	343	6	780	10	4,594
Dundas.....	380.14	1,779	255	3,862	339	.....	2	30	6,267
Elmira.....	491.32	1,664	198	1,096	280	14	227	24	3,503
Guelph.....	386.70	1,347	250	1,337	200	.....	17	9	3,160
Kitchener.....	481.51	1,708	272	2,325	420	1	170	40	4,936
Listowel.....	616.66	2,620	97	586	320	1	9	13	3,646
Mitchell.....	552.44	2,404	97	551	257	.....	.....	16	3,325
Simcoe.....	796.24	3,454	790	2,300	505	43	1,593	19	8,704
Stoney Creek...	315.22	1,166	204	6,214	549	1	141	55	8,330
Stratford.....	302.33	1,281	107	600	175	.....	.....	12	2,175
Total.....	6,067.12	24,150	3,067	21,245	3,973	90	4,365	259	57,149

**Rural Power District**  
**MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1958**

Rural operating areas by regions	Miles of primary line	Number of customers							
		Farm	Residential		Com-mercial	Summer		Power	Total
			Rural	Hamlet		Com-mercial	Other		
<b>SOUTHERN ONTARIO SYSTEM</b> (continued)									
NIAGARA									
Beamsville.....	365.63	2,125	253	2,031	380	.....	87	42	4,918
Dunnville.....	276.97	1,078	237	669	229	43	1,145	14	3,415
St. Catharines..	292.24	1,518	206	9,458	633	5	239	78	12,137
Welland.....	466.55	1,383	478	7,271	785	29	781	82	10,809
Total.....	1,401.39	6,104	1,174	19,429	2,027	77	2,252	216	31,279
<b>TORONTO</b>									
Brampton.....	542.98	1,785	704	2,112	375	16	175	58	5,225
Markham.....	284.49	981	387	4,049	418	25	501	28	6,389
Richmond Hill..	306.41	987	259	6,822	645	3	201	74	8,991
Sutton.....	345.39	1,004	255	2,693	372	105	3,207	18	7,654
Woodbridge.....	403.50	1,293	564	2,801	547	.....	88	67	5,360
Total.....	1,882.77	6,050	2,169	18,477	2,357	149	4,172	245	33,619
<b>GEORGIAN BAY</b>									
Alliston.....	484.55	1,931	246	713	236	2	33	14	3,175
Bala.....	225.49	9	153	533	102	85	2,337	5	3,224
Barrie.....	510.54	1,463	483	2,497	435	76	3,597	22	8,573
Bracebridge.....	475.84	305	420	838	209	103	3,043	4	4,922
Cannington.....	486.95	1,196	237	819	231	33	2,953	10	5,479
Huntsville.....	599.95	649	494	1,256	286	151	2,567	14	5,417
Markdale.....	642.40	2,212	163	694	301	5	560	7	3,942
Orangeville.....	502.51	1,363	366	1,228	338	9	455	9	3,768
Orillia.....	588.18	975	419	2,135	448	115	3,722	12	7,826
Owen Sound....	935.45	2,484	313	1,486	512	141	3,197	12	8,145
Parry Sound....	429.27	276	399	967	234	102	1,254	13	3,245
Penetanguishene	534.46	973	79	1,155	220	151	5,144	8	7,730
Shelburne.....	727.13	2,384	160	241	227	.....	54	.....	3,066
Stayner.....	359.15	1,165	130	1,108	241	214	3,137	3	5,998
Uxbridge.....	501.41	1,574	283	960	281	19	1,435	13	4,565
Walkerton.....	847.90	3,110	235	745	382	18	710	15	5,215
Wingham.....	699.31	2,603	67	635	333	20	738	6	4,402
Total.....	9,550.49	24,672	4,647	18,010	5,016	1,244	34,936	167	88,692



**Rural Power District**  
**MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1958**

Rural operating areas by regions	Miles of primary line	Number of customers							
		Farm	Residential		Com- mercial	Summer		Power	Total
			Rural	Hamlet		Com- mercial	Other		
<b>SOUTHERN ONTARIO SYSTEM (concluded)</b>									
<b>EAST CENTRAL</b>									
Bancroft.....	424.53	573	252	1,151	205	38	1,168	5	3,392
Belleville.....	241.82	818	184	3,011	331	2	57	23	4,426
Bowmanville....	312.92	961	220	925	218	26	105	11	2,466
Cobourg.....	589.62	1,679	431	1,301	342	70	1,000	13	4,836
Fenelon Falls...	526.47	1,052	89	738	259	141	3,253	11	5,543
Frankford.....	575.54	1,952	361	1,216	327	27	455	9	4,347
Kingston.....	835.19	2,056	515	3,935	692	26	1,448	37	8,709
Lakefield.....	415.37	548	193	609	179	80	2,615		4,224
Minden.....	475.27	354	295	1,241	321	137	3,189	5	5,542
Napanee.....	570.19	1,920	252	1,161	391	35	393	11	4,163
Norwood.....	374.15	874	153	340	122	30	1,092	5	2,616
Oshawa.....	281.77	875	345	2,692	312	5	197	22	4,448
Peterborough...	649.82	1,782	368	2,191	419	60	1,229	23	6,072
Picton.....	461.16	1,743	339	1,332	300	43	720	16	4,493
Tweed.....	588.82	1,110	506	743	325	101	861	3	3,649
<b>Total.....</b>	<b>7,322.64</b>	<b>18,297</b>	<b>4,503</b>	<b>22,586</b>	<b>4,743</b>	<b>821</b>	<b>17,782</b>	<b>194</b>	<b>68,926</b>
<b>EASTERN</b>									
Arnprior.....	422.09	1,000	159	1,022	277	38	1,319	18	3,833
Brockville.....	599.15	2,094	440	2,002	442	39	951	23	5,991
Cobden.....	1,131.55	2,393	602	3,068	774	99	1,080	29	8,045
Delta.....	458.10	1,011	227	577	252	51	1,253	3	3,374
Lancaster.....	595.48	2,226	440	1,406	464	7	312	30	4,885
Merrickville....	270.45	772	134	561	135	2	187	6	1,797
Ottawa.....	747.60	2,414	675	6,952	752	11	408	70	11,282
Perth.....	825.13	1,872	341	654	353	39	1,700	6	4,965
Plantagenet....	376.48	1,529	149	760	333		81	17	2,869
Vankleek Hill...	220.74	919	83	479	186	5	75	14	1,761
Winchester.....	808.71	3,305	315	1,520	573	4	35	32	5,784
<b>Total.....</b>	<b>6,455.48</b>	<b>19,535</b>	<b>3,565</b>	<b>19,001</b>	<b>4,541</b>	<b>295</b>	<b>7,401</b>	<b>248</b>	<b>54,586</b>

**Rural Power District**  
**MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1958**

Rural operating areas by regions	Miles of primary line	Number of customers							Power	Total
		Farm	Residential		Com- mercial	Summer				
			Rural	Hamlet		Com- mercial	Other			
NORTHERN ONTARIO PROPERTIES										
NORTHEASTERN										
Algoma.....	287.95	368	195	3,576	705	37	237	60	5,178	
Kapuskasing...	218.54	530	173	1,977	278	4	225	14	3,201	
Kirkland Lake...	93.99	80	63	138	61	15	297	2	656	
Manitoulin.....	574.42	835	244	1,392	519	71	771	25	3,857	
Matheson.....	540.19	1,076	249	1,208	275	6	317	14	3,145	
New Liskeard...	598.20	1,207	354	997	346	39	369	17	3,329	
North Bay.....	777.61	1,098	704	3,023	544	123	1,182	36	6,710	
Sudbury.....	623.35	829	828	10,979	948	11	1,172	79	14,846	
Warren.....	479.60	1,010	243	1,186	387	98	673	11	3,608	
Total.....	4,193.85	7,033	3,053	24,476	4,063	404	5,243	258	44,530	
NORTHWESTERN										
Dryden.....	277.58	402	223	407	182	30	207	4	1,455	
Fort Frances...	518.80	939	264	501	279	40	85	3	2,111	
Geraldton.....	103.04	.....	17	494	160	8	8	15	702	
Kenora.....	253.66	182	223	579	166	121	799	10	2,080	
Port Arthur....	854.18	1,791	782	2,037	393	13	1,128	16	6,160	
Sioux Lookout..	23.49	11	64	62	14	7	61	1	220	
Terrace Bay....	26.05	.....	1	406	77	.....	7	6	497	
Total.....	2,056.80	3,325	1,574	4,486	1,271	219	2,295	55	13,225	

**SUMMARY—MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1958**

System and Region	Miles of primary line	Number of customers								
		Farm	Residential		Com-mercial	Summer		Power	Total	
			Rural	Hamlet		Com-mercial	Other			
SOUTHERN ONTARIO SYSTEM										
Western . . . . .	7,507.17	31,177	3,495	32,613	5,461	215	7,165	471	80,597	
West Central . . .	6,067.12	24,150	3,067	21,245	3,973	90	4,365	259	57,149	
Niagara . . . . .	1,401.39	6,104	1,174	19,429	2,027	77	2,252	216	31,279	
Toronto . . . . .	1,882.77	6,050	2,169	18,477	2,357	149	4,172	245	33,619	
Georgian Bay . . .	9,550.49	24,672	4,647	18,010	5,016	1,244	34,936	167	88,692	
East Central . . .	7,322.64	18,297	4,503	22,586	4,743	821	17,782	194	68,926	
Eastern . . . . .	6,455.48	19,535	3,565	19,001	4,541	295	7,401	248	54,586	
Total . . . . .	40,187.06	129,985	22,620	151,361	28,118	2,891	78,073	1,800	414,848	
NORTHERN ONTARIO PROPERTIES										
Northeastern . . .	4,193.85	7,033	3,053	24,476	4,063	404	5,243	258	44,530	
Northwestern . . .	2,056.80	3,325	1,574	4,486	1,271	219	2,295	55	13,225	
Total . . . . .	6,250.65	10,358	4,627	28,962	5,334	623	7,538	313	57,755	
Total—All systems	46,437.71	140,343	27,247	180,323	33,452	3,514	85,611	2,113	472,603	







## Rural Electrical Service 1948 - 1958

## CUSTOMERS, REVENUE, AND CONSUMPTION, BY CLASSES OF SERVICE

Class of service	Year	Revenue	Consumption	Customers	Monthly consumption per customer	Average cost per kwh
		\$	kwh	No.	kwh	¢
<b>Farm</b> .....	1948	3,942,730.96	242,273,102	88,754	241	1.63
	1949	4,508,978.00	275,946,330	102,786	240	1.63
	1950	7,441,437.92	403,018,641	114,725	265	1.85
	1951	8,097,710.92	410,722,321	123,434	287	1.97
	1952	9,017,321.17	468,478,642	129,451	309	1.92
	1953	11,053,487.41	510,783,290	133,522	324	2.16
	1954	12,207,502.58	561,672,463	136,013	347	2.17
	1955	12,915,852.58	597,063,469	138,648	362	2.16
	1956	13,671,336.65	646,557,636	139,289	388	2.11
	1957	14,386,097.14	689,975,689	140,604	411	2.09
	1958	15,159,553.04	743,639,744	140,343	441	2.04
<b>Hamlet &amp; Rural Residential</b>	1948	3,279,149.63	185,225,412	85,838	193	1.77
	1949	3,552,600.42	200,875,642	98,453	182	1.77
	1950	5,712,108.72	302,905,040	115,464	202	1.89
	1951	6,380,808.20	314,271,957	124,091	219	2.03
	1952	7,253,640.00	366,600,438	133,193	238	1.98
	1953	9,560,018.46	430,507,266	150,627	253	2.22
	1954	11,194,393.02	510,800,965	160,552	274	2.19
	1955	12,734,130.77	592,590,431	177,398	292	2.15
	1956	14,639,910.88	709,141,756	181,113	330	2.06
	1957	16,174,554.38	803,953,114	196,025	355	2.01
	1958	17,732,046.03	931,982,764	207,570	385	1.90
<b>Commercial</b> ..... (Including Summer Commercial)	1948	706,949.62	41,665,764	13,489	272	1.70
	1949	1,147,167.71	69,458,813	15,576	398	1.65
	1950	2,083,696.71	113,039,553	17,879	483	1.84
	1951	2,284,851.74	115,121,444	20,110	505	1.98
	1952	2,457,032.13	125,932,132	24,564	470	1.95
	1953	3,385,239.46	149,120,428	28,870	465	2.27
	1954	3,707,824.28	166,176,082	30,403	467	2.23
	1955	3,996,936.76	186,698,211	32,509	495	2.14
	1956	4,444,185.15	211,082,610	33,481	533	2.11
	1957	4,855,540.79	233,114,413	35,179	566	2.08
	1958	5,346,040.16	260,338,850	36,966	601	2.05
<b>Summer</b> .....	1948	722,951.54	24,440,522	31,175	69	2.96
	1949	855,107.11	28,038,463	37,536	68	3.05
	1950	1,376,606.36	32,307,669	43,733	66	4.26
	1951	1,616,368.92	36,705,187	49,913	65	4.40
	1952	1,826,359.64	40,319,422	55,159	64	4.53
	1953	1,833,881.12	34,287,310	57,547	51	5.35
	1954	2,034,199.00	38,613,327	62,183	54	5.27
	1955	2,214,360.48	40,493,631	68,600	52	5.47
	1956	2,478,450.51	46,121,627	74,390	54	5.37
	1957	2,709,831.47	50,797,923	79,792	55	5.34
	1958	2,943,051.21	55,296,983	85,611	56	5.32
<b>Power</b> .....	1948	868,667.70	64,376,898	833	6,519	1.35
	1949	922,265.51	62,692,652	944	5,880	1.47
	1950	1,429,465.54	87,983,478	1,010	6,433	1.62
	1951	1,562,608.29	87,692,082	1,058	7,067	1.78
	1952	1,799,924.89	102,608,301	1,170	7,676	1.75
	1953	2,147,899.48	121,310,479	1,289	8,222	1.77
	1954	2,545,737.21	148,176,508	1,466	8,964	1.72
	1955	2,934,852.81	171,202,169	1,681	9,067	1.71
	1956	3,402,416.31	207,252,224	1,782	9,975	1.64
	1957	3,732,252.41	225,748,793	2,011	9,920	1.65
	1958	4,410,317.84	278,005,882	2,113	11,235	1.59





## APPENDIX IV—LEGISLATIVE

AT the 1958 Session of the Legislative Assembly of the Province of Ontario three Acts respecting The Hydro-Electric Power Commission of Ontario were passed. These Acts are reproduced here in full. The short titles of the Acts are as follows:

*The Lake of the Woods Control Board Amendment Act, 1958, Chapter 48.*

*The Manitoba-Ontario Lake St. Joseph Diversion Agreement Authorization Act, 1958, Chapter 56.*

*The Power Commission Amendment Act, 1958, Chapter 80.*

### ACTS

#### CHAPTER 48

#### An Act to amend The Lake of the Woods Control Board Act, 1922

*Assented to March 27th, 1958.*

*Session Prorogued March 27th, 1958.*

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Section 2 of *The Lake of the Woods Control Board Act, 1922* is repealed and the following substituted therefor:

1922, c. 21,  
s. 2,  
re-enacted

2.—(1) The Board called “The Lake of the Woods Control Board” created by *The Lake of the Woods Control Board Act, 1921* (Canada) and by *The Lake of the Woods Control Board Act, 1922* is continued and shall consist of four members and four alternate members who shall be duly qualified engineers and of whom one member and one alternate member shall be appointed by the Governor-General in Council, two members and two alternate members by the Lieutenant-Governor of Ontario in Council, and one member and one alternate member by the Lieutenant-Governor of Manitoba in Council and each of the persons so appointed shall hold office during the pleasure of the Governor-General in Council, the Lieutenant-Governor of Ontario in Council or the Lieutenant-Governor of Manitoba in Council, respectively, and any vacancy on the Board shall be filled by the Governor-General in Council or the Lieutenant-Governor in Council who appointed the person who formerly occupied the vacant appointment.

Constitution  
of Board  
1921, c. 10  
(Can.)

Voting by  
alternates

- (2) An alternate member is entitled to sit and vote only during the absence of the member for whom he was appointed as alternate.

1922, c. 21,  
s. 3, cl. b,  
re-enacted

2.—(1) The second clause *b* of section 3 of *The Lake of the Woods Control Board Act, 1922* is repealed and the following substituted therefor:

- (b) To regulate and control the outflow of the waters of Lac Seul so as to maintain the level of the lake between such elevations as the Board may from time to time recommend and which shall be approved by the Governor-General in Council, the Lieutenant-Governor of Ontario in Council and the Lieutenant-Governor of Manitoba in Council, and to regulate and control the flow into Lac Seul through the Lake St. Joseph diversion works at such times as the level of Lac Seul rises above elevation 1169 feet during the months of January and June, above elevation 1168 feet during the months of February, March, April and May and above elevation 1170 feet during the months of July, August, September, October, November and December, or above such higher elevations as are authorized by the Board from time to time.

1922, c. 21,  
s. 3, cl. d,  
amended

(2) Clause *d* of the said section 3 is amended by striking out “and the Lieutenant-Governor in Council may both” in the third and fourth lines and inserting in lieu thereof “the Lieutenant-Governor of Ontario in Council and the Lieutenant-Governor of Manitoba in Council may”, so that the clause shall read as follows:

- (d) To regulate and control the level and flow of such other waters of the watershed of the Winnipeg river as the Governor-General in Council, the Lieutenant-Governor of Ontario in Council and the Lieutenant-Governor of Manitoba in Council may agree to place under the jurisdiction of the said Board. Save and excepting the control and operation of all dams and regulating works extending across the International Boundary and the dam and regulating works across the Canadian channel at Kettle Falls.

1922, c. 21,  
s. 3,  
amended

(3) The said section 3 is further amended by adding thereto the following subsection:

Interpre-  
tation

- (2) In this section, any reference to water elevations shall be related to mean sea level (Geodetic Survey of Canada. Adjustment previous to that of 1923). Referred to brass cap bench mark Number 988-A, elevation 1183.075.

3. Section 5 of *The Lake of the Woods Control Board Act, 1922* is <sup>1922, c. 21, s. 5, amended</sup> amended by inserting after "Canada" in the fourth line "and by any Act passed by the Legislature of Manitoba" and by inserting after "Ontario" in the sixth line "or of Her Majesty's Court of Queen's Bench for Manitoba", so that the section shall read as follows:

5. The said Board shall have all the powers necessary for effectively carrying out the authority and control vested in it by this Act and by any Act passed by the Parliament of the Dominion of Canada and by any Act passed by the Legislature of Manitoba and any order made by the said Board may be made a rule, order or decree of the Exchequer Court of Canada or of the Supreme Court of Ontario or of Her Majesty's Court of Queen's Bench for Manitoba and shall be enforced in the same manner as any rule, order or decree may be enforced in the court in which such proceeding is taken. <sup>Enforcement of order</sup>

4. Section 9 of *The Lake of the Woods Control Board Act, 1922* is <sup>1922, c. 21, s. 9, re-enacted</sup> repealed and the following substituted therefor:

9. The expenses of the Board, including the remuneration of the members or alternate members of the Board, shall be paid out of such funds as may be appropriated by the Parliament of Canada and the Legislatures of Ontario and Manitoba respectively for paying expenses incurred for the purposes of this Act in such proportions as the Governor-General in Council and the respective Lieutenant-Governors in Council may agree. <sup>Expenses of Board</sup>

5. Subsection 1 of section 10 of *The Lake of the Woods Control Board Act, 1922* is <sup>1922, c. 21, s. 10, subs. 1, amended</sup> amended by striking out "Lieutenant-Governor" in the second line and inserting in lieu thereof "respective Lieutenant-Governors", so that the sub-section shall read as follows:

(1) The Governor-General in Council and the respective Lieutenant-Governors in Council may make such regulations (including provisions as to what shall constitute a quorum of the Board, and how orders of the Board shall be signed), as they may agree to be necessary for carrying out the provisions of this Act. <sup>Regulations</sup>

6. This Act comes into force on a day to be named by the Lieutenant-Governor by his Proclamation.\* <sup>Commencement</sup>

7. This Act may be cited as *The Lake of the Woods Control Board Amendment Act, 1958*. <sup>Short title</sup>

\*Proclaimed in force September 17, 1958.



CHAPTER 56

**An Act to authorize the Government of Ontario and The Hydro-Electric Power Commission of Ontario to enter into an Agreement with the Government of Manitoba and The Manitoba Hydro-Electric Board respecting the diversion of certain waters into the Winnipeg River and the power generated from such waters**

*Assented to March 27th, 1958.*

*Session Prorogued March 27th, 1958.*

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario enacts as follows:

Agreement  
authorized

1. The Government of Ontario, represented by the Minister of Lands and Forests, and The Hydro-Electric Power Commission of Ontario may enter into an agreement substantially in the form set out as the Schedule hereto with the Government of Manitoba and The Manitoba Hydro-Electric Board respecting the diversion of certain waters into the Winnipeg River and the power generated from such waters.

Commence-  
ment

2. This Act comes into force on the day it receives Royal Assent.

Short title

3. This Act may be cited as *The Manitoba-Ontario Lake St. Joseph Diversion Agreement Authorization Act, 1958.*

SCHEDULE

AGREEMENT made this                      day of                      , 1958

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA (herein represented by the Honourable Douglas Campbell, Premier of Manitoba), hereinafter called "Manitoba",

OF THE FIRST PART,

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF ONTARIO (herein represented by the Honourable Clare E. Mapledoram, Minister of Lands and Forests), hereinafter called "Ontario",

OF THE SECOND PART,

THE MANITOBA HYDRO-ELECTRIC BOARD, hereinafter called the "Board",

OF THE THIRD PART,

—and—

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO, hereinafter called the "Commission",

OF THE FOURTH PART.

WHEREAS the Commission wishes to store water in Lake St. Joseph in the District of Kenora, in the Province of Ontario, and to divert water therefrom by way of the Root River into Lac Seul in the said District of Kenora and thereby into the English and Winnipeg Rivers within the Province of Ontario for the purpose of increasing the energy production of generating stations of the Commission located on the English River, and the Commission proposes to construct, operate and maintain the works and structures necessary for such purpose;

AND WHEREAS Ontario is agreeable to the diversion by the Commission of the said water;

AND WHEREAS the Board wishes to utilize the said diverted water in the generation of electrical energy in generating stations located on the Winnipeg River within the Province of Manitoba;

AND WHEREAS the Board has agreed to make available to the Commission, under the terms and provisions hereinafter appearing, the quantities hereinafter referred to of energy deemed capable of being produced at generating stations on the Winnipeg River in the Province of Manitoba from or by the said diverted water;

AND WHEREAS subject to the terms and provisions hereinafter appearing, Manitoba is agreeable to accepting the said diverted water into the Winnipeg River within the Province of Manitoba;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the premises the parties hereto agree as follows:

1. Ontario does hereby authorize and empower the Commission to divert water from Lake St. Joseph, in the District of Kenora, in the Province of Ontario, by way of the Root River into Lac Seul, in the said District of Kenora and thereby into the English and Winnipeg Rivers within the Province of Ontario, and to construct, operate and maintain all such works and structures (hereinafter called the "diversion works") necessary or required for the purposes thereof and does further authorize and empower the Commission to exercise and enjoy, in relation to the diversion of such water, all of its rights and powers under *The Power Commission Act*, R.S.O. 1950, Chapter 281.

2. Subject to the provisions of paragraph 5 hereof, Manitoba does hereby undertake and agree to accept the diverted water into the Winnipeg River within the Province of Manitoba and does hereby authorize and empower the Board to utilize the said diverted water for its purposes.

3. The Commission does hereby undertake and agree to construct, operate and maintain the diversion works and, subject

to the provisions of *The Power Commission Act*, to pay the full cost of such construction, operation and maintenance.

4. Subject to the provisions of *The Lake of the Woods Control Board Act, 1922*, Statutes of Ontario 1922, Chapter 21, and of *The Lake of the Woods Control Board Act, 1921*, Statutes of Canada 1921, Chapter 10, in each case as amended or re-enacted from time to time and of this agreement, the Commission does hereby undertake and agree to operate, maintain and control the diversion works in such manner as to secure severally and at all times the most dependable flow and the most advantageous and beneficial use of the diverted water for the purposes of the generation of power within the Provinces of Ontario and Manitoba.

5. In operating, maintaining and controlling the diversion works under this agreement, the Commission will exercise its best endeavour to ensure that water will not be diverted from Lake St. Joseph at such times or in such manner as will be likely to result in flows in the Winnipeg River in excess of Thirty-four Thousand (34,000) cubic feet per second at the Slave Falls Generating Station in Manitoba and whenever and for as long as flows in the Winnipeg River at said generating station shall exceed, or appear likely to exceed, Thirty-four Thousand (34,000) cubic feet per second, the Commission will cease or restrict such diversion, as the case may be, if, when and for so long as requested to do so by Manitoba or the Board.

6. It is understood and agreed that as between the Board and the Commission, the Commission shall be entitled to all of the energy produced within the Province of Ontario from or by the diverted water.

7. The Commission shall be entitled to receive from the Board, and the Board undertakes and agrees to deliver to the Commission, in the manner hereinafter provided, quantities of energy equivalent to one-half of the "total weekly productive energy" in each week as defined in Section C of Schedule "A" hereto, calculated in accordance with the provisions of this agreement and the principles set forth in said Schedule.

8. The Commission undertakes and agrees that it will pay to the Board, in the manner hereinafter provided 1.4 mills per kilowatt-hour for all energy demanded by the Commission and delivered by the Board pursuant to this agreement. For the purpose only of calculating the appropriate payments, delivery shall be deemed to have been made at the 115 KV bus at Seven Sisters Generating Station.

9. The point of delivery to the Commission under this agreement of energy to which the Commission is entitled shall be at



the boundary between the Provinces of Manitoba and Ontario and said energy shall be delivered by means of existing or future interconnecting transmission facilities between the systems of the Commission and of the Board. The energy delivered by the Board to the Commission under this agreement shall be measured and determined from readings of watthour meters or recording demand meters supplied, maintained and read by the Board or the Commission, having a demand interval of one hour. Such meters may be installed at any location convenient to the Board and to the Commission on the interconnecting transmission line or lines. An appropriate allowance shall be made in all measurements for line losses between the metering points and the intersection of the said interconnecting transmission line or lines with the said Interprovincial boundary.

10. Promptly after the beginning of each calendar month, the Board will render to the Commission a bill for the energy delivered under this agreement during the previous month. Such bills shall be paid within fifteen (15) days of the date upon which the same are received, and payment shall be made by cheque payable at par at Winnipeg, Manitoba.

11. The quantity of energy to which the Commission is entitled under this agreement in any week, calculated in accordance with the principles set out in said Schedule "A", shall normally be demanded by and delivered to the Commission within the week next ensuing such week of entitlement; provided that delivery may be delayed beyond such time at the request of the Commission or the Board if such request be approved by the non-requesting party. Subject to the foregoing, delivery of energy to the Commission will be made at such times as are suitable to the Commission and to the Board, it being understood that the Board shall not be obliged to deliver energy under this agreement during the period of the daily peak loads on the electrical system of the Board.

12. In producing energy from said diverted water or in delivering energy to the Commission under this agreement, the Board shall not be required to operate any equipment at loads in excess of those which it considers to be within safe limits or which in its opinion will result in undue shortening of the life of the equipment, nor shall the Board be required to construct additional facilities or to defer maintenance solely for the purpose of delivering energy to the Commission under this agreement.

13. For the purpose of facilitating the carrying out of the terms of this agreement as between the Commission and the Board, there is hereby established an Operating Committee consisting of two members, one of whom, or his alternate appointed hereunder, shall be the representative of the Board and the other of

whom, or his alternate so appointed, shall be the representative of the Commission.

14. The Operating Committee is authorized on behalf of the Board and of the Commission respectively to do all acts and things necessary to carry out the provisions under this agreement respecting the control and diversion of water and the determination, delivery and measurement of energy to which the Commission is entitled, and for such purposes the Operating Committee shall have access at all reasonable times to the pertinent and relevant records and accounts of the Board and of the Commission, which shall each furnish to the Operating Committee all such relevant and pertinent information as may be necessary to enable the Committee to perform its duties.

15. All the decisions of the Operating Committee in respect of matters within its jurisdiction shall be unanimous. In the event that the members of the Operating Committee fail to agree on any matter, the subject of disagreement shall be referred to the General Managers of the Board and of the Commission respectively for their decision. In the event that the said General Managers fail to agree on such referred matter, the subject of disagreement shall be referred for decision to a consulting engineer or to a firm of consulting engineers to be selected by the General Managers, and the decision of such engineer or firm shall be final and binding on the Board and the Commission.

16. The Board hereby appoints Mr. C. G. Mills as its representative on the Operating Committee and Mr. V. W. Dick as his alternate. The Commission hereby appoints Mr. F. C. Lawson as its representative on the Operating Committee and Mr. W. G. Chandler as his alternate.

17. Each of the Board and the Commission may from time to time remove and replace any member of the Operating Committee or his alternate appointed by it and shall fill any vacancy promptly. Prompt notice in writing of removals and replacements under this paragraph will be given by the Board or by the Commission to the other.

18. Manitoba and the Board shall indemnify and save harmless Ontario and the Commission of, from and against any and all loss, costs and damages to which Ontario or the Commission shall be put or shall suffer arising or resulting in any manner whatsoever within the Province of Manitoba from the introduction into the Winnipeg River of the diverted water to the extent permitted by this agreement, and Ontario and the Commission shall indemnify and save harmless Manitoba and the Board of, from and against any and all loss, costs and damages to which

Manitoba or the Board shall be put or shall suffer arising or resulting in any manner whatsoever within the Province of Ontario from the introduction into Lac Seul, the English River and the Winnipeg River of the diverted water as permitted by this agreement or the diversion of such water from Lake St. Joseph and its normal water courses.

19. The General Managers of the Board and the Commission, acting jointly, may from time to time in writing amend the provisions of Schedule "A" hereto, other than Section C thereof, and the parties hereto shall be bound by any such amendment.

20. This agreement shall take effect upon the completion by the Commission of the diversion works and notification thereof to the Board and shall continue in full force and effect unless and until terminated by Manitoba, by Ontario, by the Board or by the Commission by at least Four (4) years' notice given in writing and by registered mail addressed to the other parties to the agreement. Upon termination of this agreement, the Commission will cease the diversion of water from Lake St. Joseph into Lac Seul.

21. This agreement shall enure to the benefit of and be binding upon the parties hereto, their and each of their respective successors and assigns.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed.

.....  
*Premier of the Province of Manitoba.*

.....  
*Minister of Lands and Forests.*

THE MANITOBA HYDRO-ELECTRIC BOARD:

.....  
*Chairman.*

.....  
*Secretary.*

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO:

.....  
*Chairman.*

.....  
*Secretary.*



## SCHEDULE "A"

General principles for determination of the share of The Hydro-Electric Power Commission of Ontario of energy deemed capable of being generated at the generating stations on the Winnipeg River in Manitoba from water diverted from Lake St. Joseph.

Section A—*Measurements*

To be measured continuously:

- (1) Discharge from Lake St. Joseph to Lac Seul.
- (2) Discharge from Lac Seul to English River.
- (3) Discharge at Manitou Falls Generating Station.
- (4) Discharge at Caribou Falls Generating Station.

Each of the above shall be averaged for weekly periods.

To be measured at the end of each week:

- (5) The elevation of the water level in Lac Seul.
- (6) The elevation of the water level in Manitou Falls forebay.
- (7) The elevation of the water level in the Caribou Falls forebay.

Section B—*Adjusted Diverted Water*

The adjusted diverted water in each week is the water diverted from Lake St. Joseph in that week adjusted for a portion that is to be stored or a portion previously stored in Lac Seul and/or the forebays of the Commission's Manitou Falls and Caribou Falls generating stations, allowing for appropriate time lags.

Section C—*Total Weekly Productive Energy*

The weekly productive energy at each generating station on the Winnipeg River in Manitoba is the difference between the amount of energy which could be produced at that station in a given week from the total river flow in that week (with the equipment currently available at that station) and the amount of energy which could be produced at the same station in that week from the total river flow in that week less the adjusted diverted water in that week. The total weekly productive energy is the sum of the above in the same week for the several stations on the Winnipeg River in the Province of Manitoba.

Section D—*Energy Delivered to the Commission*

The one-half of the total weekly productive energy to which the Commission is entitled at the Interprovincial boundary is to be reduced by an appropriate allowance for line losses

between the Interprovincial boundary and the 115 KV bus in Seven Sisters Generating Station.

Section E—*Operating Committee*

The Operating Committee is authorized to make the detailed calculations required to carry out the general principles described above, which calculations are to be made in accordance with methods to be set out fully in an Operating Committee Standard Practice.

CHAPTER 80

An Act to amend The Power Commission Act

*Assented to March 27th, 1958.*

*Session Prorogued March 27th, 1958.*

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Subsection 3 of section 45a of *The Power Commission Act*, as enacted by section 5 of *The Power Commission Amendment Act, 1952*, is repealed and the following substituted therefor:

R.S.O. 1950,  
c. 281, s. 45a  
(1952, c. 77,  
s. 5), subs. 3,  
re-enacted

(3) The Commission shall also pay the amount that the current rates on business assessment on lands owned by and vested in the Commission or buildings used exclusively for executive and administrative purposes and owned by and vested in the Commission would produce based on 60 per cent of the assessed values of such land or buildings as determined under this section.

Annual  
payments  
to municipi-  
palities

2. Sections 81, 82 and 83 of *The Power Commission Act* are repealed and the following substituted therefor:

R.S.O. 1950,  
c. 281, s. 81,  
re-enacted;  
ss. 82, 83,  
repealed

81.—(1) Notwithstanding anything in this or any other Act, a township may, without petition and without the assent of the electors, pass a by-law for entering into a contract with the Commission for the lighting of streets in the township.

Contracts  
for street  
lighting  
in town-  
ships

(2) The by-law may,

Contents of  
by-law

- (a) define one or more street lighting areas in the township;
- (b) enlarge, reduce or alter the boundaries of any street lighting area in the township;
- (c) amalgamate any street lighting areas in the township;

- (d) provide that the cost of the street lighting works in any street lighting area in the township, including debenture charges, the cost of maintenance and management of the works and the cost of power supplied for street lighting under this Act, shall be assessed and levied on the rateable property in the area, or provide that such part of the cost as to the council seems proper shall be paid by the township and that the remainder of the cost shall be assessed and levied on the rateable property in the area, or provide that the entire cost shall be paid by the township; and
- (e) provide that the contract with the Commission shall apply to any street lighting area.

Maps

- (3) Any street lighting area may be defined by the use of a map or sketch to be attached to the by-law and the information shown on the map or sketch shall form part of the by-law to the same extent as if included therein.

Power of township to construct works

- (4) The township may acquire or construct the works necessary for lighting the streets, and for such purpose the township shall have and may exercise all the powers conferred upon townships under *The Municipal Act* or *The Local Improvement Act*.

R.S.O. 1950, cc. 243, 215

Power of Commission to construct works

- (5) If the contract so provides, the Commission may, on behalf of the township, acquire, construct, extend, reconstruct, maintain, operate and administer any such street lighting works.

Where Part II to apply

- (6) The provisions of Part II with respect to the annual payments to be made by any municipality that has entered into a contract with the Commission apply to any contract entered into under this section and extend to all street lighting works constructed under the contract, but do not apply in respect of the capital cost of works acquired or constructed by the township.

R.S.O. 1950, c. 281, ss. 94, 95, repealed

3. Sections 94 and 95 of *The Power Commission Act* are repealed.

Commencement

4. This Act shall be deemed to have come into force on the 1st day of January, 1958.

Short title

5. This Act may be cited as *The Power Commission Amendment Act, 1958*.



## ORDER IN COUNCIL

The agreements between The Hydro-Electric Power Commission of Ontario and municipalities and corporations mentioned in the list hereunder given were approved by Order in Council.

VILLAGE		IMPROVEMENT DISTRICTS
Pickering.....	Apr. 11, 1958	Deep River..... May 1, 1958
		Gladstone..... Apr. 24, 1958
TOWNSHIP		
Falconbridge.....	Apr. 24, 1958	

## CORPORATIONS

Atlas Steels Limited.....	Aug. 22, 1958
Atlas Steels Limited.....	Aug. 22, 1958
Aunor Gold Mines, Limited.....	May 14, 1958
Broulan Reef Mines Limited.....	Oct. 28, 1958
Building Products Limited.....	Mar. 26, 1958
Canadian Rock Salt Company Limited.....	Feb. 20, 1958
Dome Mines Limited.....	July 11, 1958
Dominion Fertilizers Ltd.....	May 12, 1958
Falconbridge Nickel Mines Limited.....	Dec. 24, 1958
Harvey Construction Company Limited.....	Feb. 20, 1958
Her Majesty the Queen in right of Canada, represented by the Minister of Transport.....	May 22, 1958
Her Majesty the Queen in right of the Province of Ontario, represented by the Minister of Public Works for the Province of Ontario.....	Aug. 28, 1958
Hollinger Consolidated Gold Mines Limited.....	June 3, 1958
Howard Smith Paper Mills, Limited.....	Sept. 18, 1958
Imperial Oil Limited.....	June 19, 1958
Imperial Oil Limited.....	June 19, 1958
Kimberly-Clark Pulp and Paper Company Limited.....	Aug. 27, 1958
McKinnon Industries, Limited.....	May 29, 1958
Ontario Water Resources Commission.....	Aug. 13, 1958
Page-Hersey Tubes, Limited.....	May 22, 1958
Pembroke Electric Light Company Limited.....	Feb. 10, 1958
Pembroke Electric Light Company Limited.....	July 16, 1958
Port Weller Dry Docks Limited.....	May 12, 1958
Queenston Gold Mines Limited.....	Sept. 18, 1958
Steeple Rock Iron Mines Limited.....	Apr. 1, 1958
University of Western Ontario, the Board of Governors.....	Nov. 21, 1958
Welland Tubes Limited.....	Feb. 25, 1958
Young, H. G., Mines Limited.....	Oct. 30, 1958



## MUNICIPAL ELECTRICAL SERVICE

THIS municipal service supplement brings conveniently into one section statistical information relating to retail service to customers supplied by the 354 municipal electrical utilities and the 29 Commission-owned local systems. The number of domestic, commercial and power service customers so supplied had increased by 64,352 during the year and at December 31 stood at 1,284,584.

The numbers in the various customer groups that contribute to this total reflect reclassifications of customers being made in conjunction with the introduction of new rate schedules. The purpose of these reclassifications is that certain power customers, for example small processing companies such as dairies and bakeries, shall be billed under commercial service, and that commercial service customers with connected loads of less than 5 kilowatts shall be billed under domestic service. The table on page 196 provides some indication of the growth in domestic, commercial, and power service over a 15-year period. The statistical information relative to energy consumption and unit cost for these three main classes of service is reproduced in the graphs on page 197.

The revenues derived from street lighting are based on estimated consumption only. A total of 223,124,223 kilowatt-hours was billed by the municipal utilities and local systems for this type of service (See table on page 116) and the revenue applicable to the municipal utilities is given in the analysis of revenue and expense that follows. In each of the operating



statements of the utilities the revenue from street lighting is included in the amount shown for sales of electric energy. It can be derived for any utility by subtracting from the revenue shown in Statement "B" the sum of the revenues for the same utility shown in Statement "D".

## Municipal Electrical Utilities and Local Systems

### CUSTOMERS, REVENUE, AND CONSUMPTION

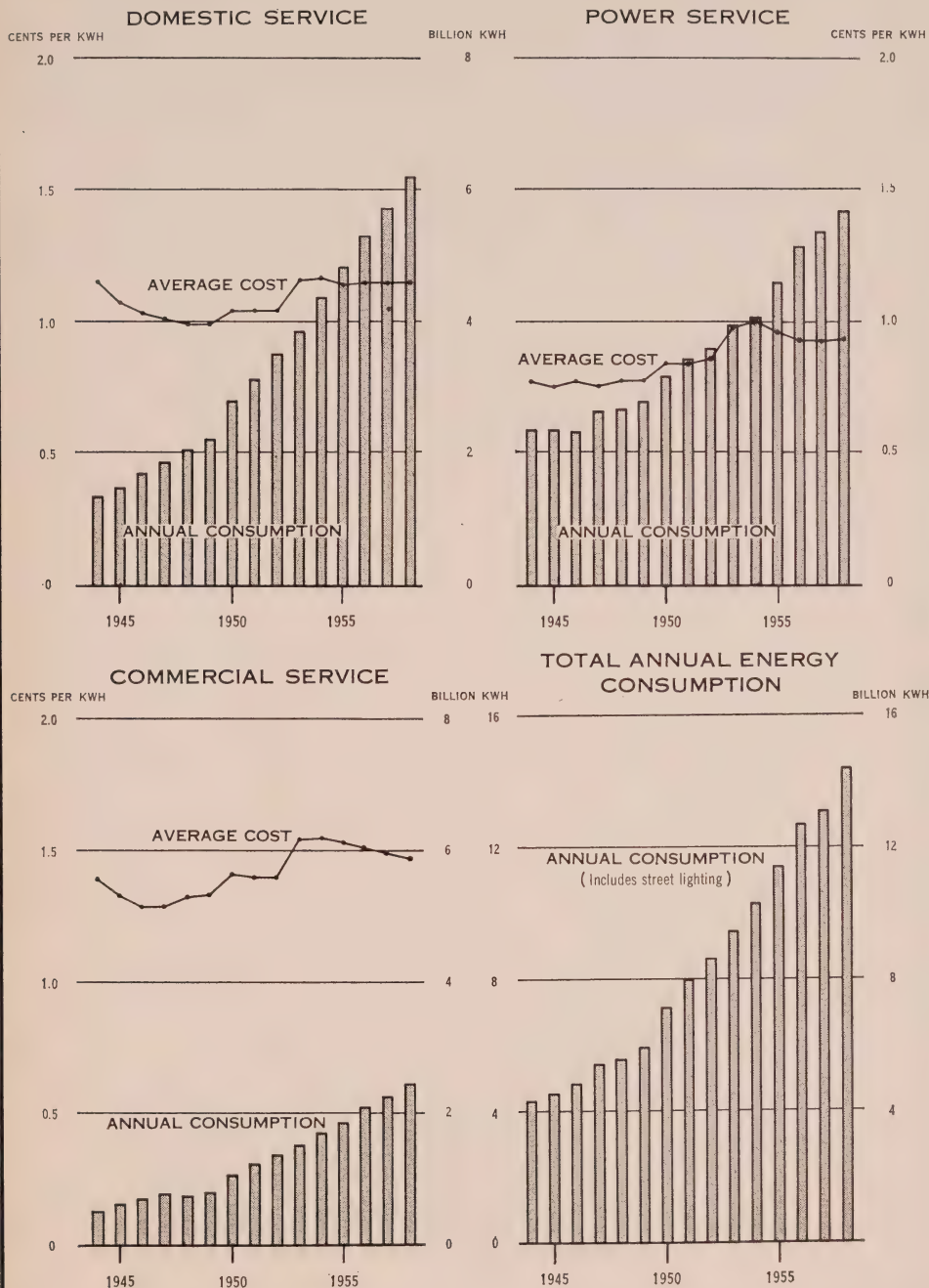
1944 to 1958

Service	Year	Revenue	Consumption	Customers	Monthly consumption per customer	Average cost per kwh
		\$	kwh	No.	kwh	¢
Domestic.....	1944	15,528,445	1,348,099,019	579,890	194	1.15
	1945	16,053,818	1,494,258,124	608,905	205	1.07
	1946	17,526,854	1,704,125,246	628,118	226	1.03
	1947	18,937,674	1,870,974,898	648,282	240	1.01
	1948	20,295,932	2,032,922,876	671,914	252	1.00
	1949	21,947,915	2,224,473,480	706,294	262	0.99
	1950	29,064,176	2,805,149,825	767,286	304	1.04
	1951	32,905,664	3,165,537,195	800,033	330	1.04
	1952	36,811,115	3,526,507,079	836,802	351	1.04
	1953	44,647,668	3,863,977,405	877,323	367	1.16
	1954	50,833,346	4,395,521,145	930,674	394	1.16
	1955	55,241,247	4,836,433,016	970,829	415	1.14
	1956	61,234,494	5,310,916,819	1,031,482	429	1.15
	1957	65,842,103	5,700,736,923	1,072,868	443	1.15
	1958	69,804,608	6,088,215,493	1,139,061	445	1.15
Commercial.....	1944	7,298,848	524,905,356	78,256	559	1.39
	1945	8,429,573	634,878,480	84,413	627	1.33
	1946	9,364,009	725,475,237	89,109	679	1.29
	1947	10,277,574	797,642,711	91,926	723	1.29
	1948	10,182,051	769,650,340	95,239	673	1.32
	1949	10,890,639	819,475,244	98,682	692	1.33
	1950	15,231,494	1,080,316,296	107,817	832	1.41
	1951	17,549,402	1,254,339,597	111,154	940	1.40
	1952	19,502,920	1,394,152,087	115,304	1,008	1.40
	1953	23,603,194	1,532,991,241	119,498	1,069	1.54
	1954	26,293,250	1,701,167,341	123,884	1,144	1.55
	1955	28,576,115	1,866,799,984	127,913	1,216	1.53
	1956	31,423,691	2,087,639,883	127,497*	1,365	1.51
	1957	33,901,487	2,276,182,472	124,757*	1,520	1.49
	1958	35,968,060	2,447,910,663	122,446*	1,666	1.47
Power.....	1944	18,375,443	2,374,869,860	13,860	14,279	0.77
	1945	17,770,481	2,346,870,889	14,726	13,281	0.76
	1946	17,981,265	2,329,774,691	15,529	12,502	0.77
	1947	19,989,875	2,652,001,321	16,325	13,538	0.75
	1948	20,742,344	2,687,513,708	16,886	13,263	0.77
	1949	21,814,062	2,806,244,668	17,594	13,292	0.78
	1950	26,966,954	3,193,783,939	18,788	14,166	0.84
	1951	29,353,071	3,459,742,798	19,370	14,884	0.85
	1952	31,403,227	3,619,518,306	20,055	15,040	0.87
	1953	38,482,884	3,948,124,809	20,885	15,753	0.98
	1954	40,855,075	4,089,513,923	21,671	15,726	1.00
	1955	44,270,882	4,637,527,118	22,237	17,379	0.96
	1956	47,808,610	5,140,704,025	22,809	18,782	0.93
	1957	50,124,976	5,366,245,253	22,607*	19,781	0.93
	1958	52,741,979	5,651,743,390	23,077	20,409	0.93

\* Decrease in number of customers reflects reclassifications from commercial to domestic and from power to commercial billing.

# MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

## ANNUAL ENERGY CONSUMPTION AND AVERAGE COST PER KILOWATT-HOUR



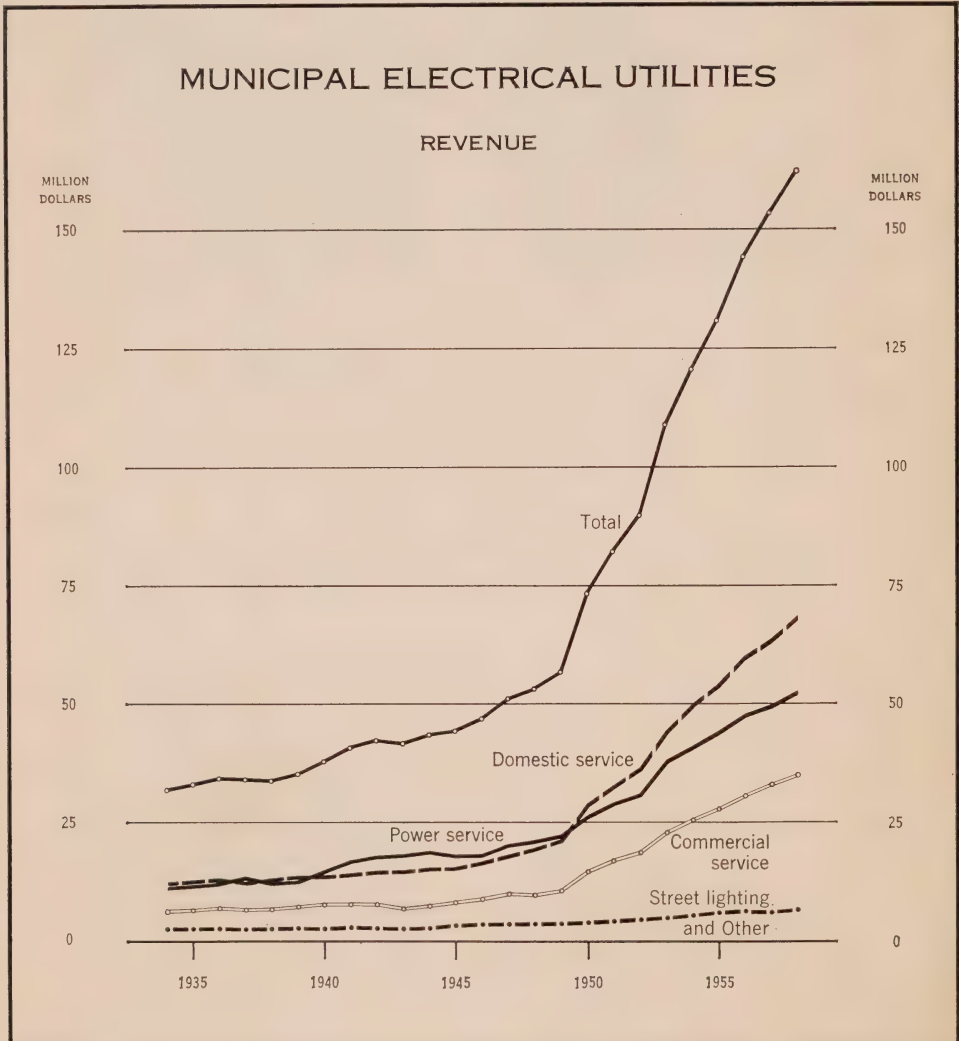
## MUNICIPAL ELECTRICAL UTILITIES

### Revenue and Expense

In this year's Report cents have been omitted from the operating reports and balance sheets of the municipal utilities. The total revenue increased by 5.9 per cent from \$153,435,888 to \$162,424,745 in 1958. Domestic service revenue at \$68,274,886 represented 42.0 per cent of the total, commercial service revenue at \$35,105,441 was 21.6 per cent and power service revenue at \$52,447,376 was 32.3 per cent. Street-lighting revenue amounted to \$4,873,056 and miscellaneous revenue to \$1,723,986 or 3.0 and 1.1 per cent respectively.

### Summary of Financial Position

The investment of the utilities in fixed assets at cost at December 31, 1958 amounted to \$349,706,161, against which accumulated depreciation



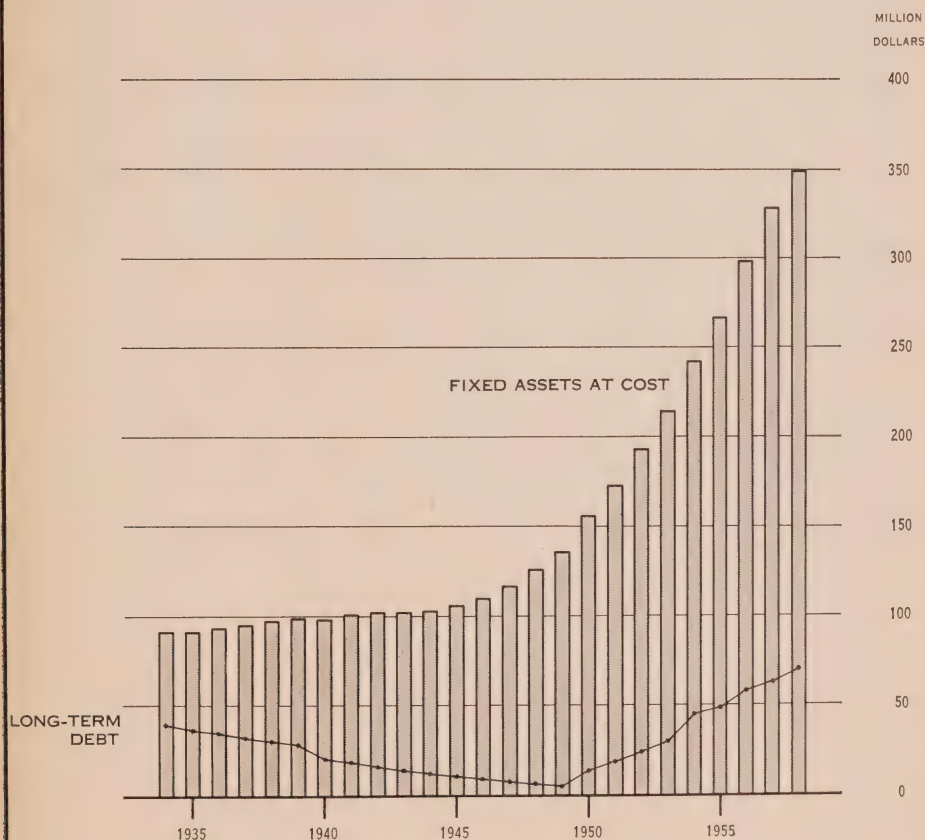


of \$72,673,866 had been provided. Total assets, after deducting accumulated depreciation, amounted to \$554,268,427 of which \$218,736,441 represented the equity in the Commission's systems acquired by municipal utilities operating under cost contracts with the Commission. This equity is the counterpart of the sinking fund reserve shown under Capital on the Commission's balance sheets. The amounts shown in the two statements differ because most utilities close their books before the Commission's calculation of sinking fund for the year is available, and they therefore show the equity account as at the end of the previous rather than the current year.

The utilities' investment in fixed assets was increased by \$21,780,187. The net long-term debt, allowing for changes in local sinking fund for retirement of capital debt, rose only by \$5,576,618. At \$68,330,356 net debt was 19.5 per cent of the cost of fixed assets.

## MUNICIPAL ELECTRICAL UTILITIES

### FIXED ASSETS AND LONG-TERM DEBT



**Municipal Retail Rates**

Under The Power Commission Act the Commission exercises supervisory control over the activities of the municipal electrical utilities, and their rates to ultimate customers are subject to the Commission's approval. These rates must provide the utility with sufficient revenue to meet the cost of providing service and should also distribute this cost equitably among the customers being served.

Basically revised rate structures were introduced in 1956 following studies carried out over a period of years by the Commission in conjunction with the rates committee of the Association of Municipal Electrical Utilities of Ontario. The need for revision was apparent because of radical changes that have taken place in recent years both in the requirements of customers and in the cost of providing electrical service for them. The adoption of the new rate structures will result in a more uniform application of the basic principles of rate development and will eliminate a great many anomalies and inequities that have arisen because of piecemeal changes over the years. The utilities are now changing over progressively to the new rate structures as revisions in their particular schedules become necessary.

**Financial and Statistical Tables**

Four statistical tables complete this municipal service supplement. The first two, designated "Statements A and B", and summarized on page 203 deal with accounting operations of the 354 municipal electrical utilities. These statements are the balance sheets and operating reports of the utilities alphabetically arranged for the Southern Ontario System and the Northern Ontario Properties. The other two statements, designated "Statement C" and "Statement D" give rates and statistics for each of the 354 utilities and 29 Commission-owned local systems. Both statements are alphabetically arranged. The rate schedules in Statement "C" are supplemented by typical monthly bills for selected levels of consumption to facilitate comparison of the cost of service in different municipalities. Statement "D" gives information supplementary to that given in Statement "B" regarding customers, revenue, and consumption, both total and average per customer, as well as average unit costs for the three main classes of service. The population figures given are those recorded in the Municipal Directory for 1959 published by the Department of Municipal Affairs of Ontario.

**MUNICIPAL ELECTRICAL SERVICE**

**Statistical Tables**

**STATEMENTS A and B**

**Financial Statements of the Municipal Electrical Utilities**

**Consolidated for Years 1949 to 1958 . . . . . Page 202**

**By Municipalities . . . . . Page 204**

**STATEMENT C**

**Rates and Typical Bills for Electrical Service Provided by the**

**354 Municipal Electrical Utilities and 29 Local Systems . . . . . Page 254**

**STATEMENT D**

**Customers, Revenue, and Consumption in Municipalities Served by**

**the 354 Municipal Electrical Utilities and 29 Local Systems . . . . . Page 276**



# MUNICIPAL ELECTRICAL UTILITIES

Year.....	1949	1950	1951	1952
Number of municipalities included.....	315	321	324	327
<b>A. BALANCE SHEETS</b>				
<b>FIXED ASSETS</b>				
Plant and facilities at cost.....	\$ 136,745,779	\$ 156,148,064	\$ 173,722,457	\$ 193,795,886
Accumulated depreciation.....	43,893,598	46,310,559	48,087,417	50,985,329
Net fixed assets.....	92,852,181	109,837,505	125,635,040	142,810,557
<b>CURRENT ASSETS</b>				
Cash on hand and in bank.....	2,654,186	2,807,734	3,276,779	4,667,729
Investment in government securities....	24,109,962	19,706,945	16,291,593	11,542,720
Accounts receivable.....	4,878,683	6,922,076	7,727,033	7,386,628
Total current assets.....	31,642,831	29,436,755	27,295,405	23,597,077
<b>OTHER ASSETS</b>				
Inventory of stores, tools and equipment at cost less depreciation.....	4,229,137	5,114,209	7,514,369	8,001,403
Sinking fund on local debentures.....	569,498	592,491	613,435	388,410
Miscellaneous.....	1,245,093	1,685,128	1,636,237	1,889,669
Total other assets.....	6,043,728	7,391,828	9,764,041	10,279,482
Equity in Ontario Hydro Systems.....	100,051,663	108,475,000	118,269,171	128,655,935
	<b>230,590,403</b>	<b>255,141,090</b>	<b>280,963,657</b>	<b>305,343,051</b>
<b>LIABILITIES</b>				
Debentures outstanding.....	4,545,745	14,069,133	18,889,520	24,159,239
Accounts payable.....	6,610,041	7,377,031	9,738,476	10,375,202
Other.....	2,984,133	1,489,029	1,612,914	1,762,833
Total liabilities.....	14,139,918	22,935,193	30,240,910	36,297,274
<b>RESERVES</b>				
Equity in Ontario Hydro Systems.....	100,051,663	108,475,000	118,269,171	128,655,935
Other.....	4,673,979	4,314,186	5,628,317	8,008,752
Total reserves.....	104,725,642	112,789,186	123,897,488	136,664,687
<b>CAPITAL</b>				
Debentures redeemed.....	55,525,206	56,534,878	59,434,312	60,260,350
Local sinking fund.....	569,498	592,491	613,435	388,410
Accumulated net income invested in plant or held as working funds....	55,638,367	62,522,125	67,511,315	72,374,288
Frequency standardization expense charged this year.....	8,228	232,783	733,803	641,958
Total capital.....	111,724,843	119,416,711	126,825,259	132,381,090
	<b>230,590,403</b>	<b>255,141,090</b>	<b>280,963,657</b>	<b>305,343,051</b>
<b>B. OPERATING STATEMENTS</b>				
<b>REVENUE</b>				
Sales of electric energy.....	55,455,390	72,091,026	80,964,214	88,744,441
Other.....	1,447,810	1,432,506	1,347,467	1,314,598
Total revenue.....	<b>56,903,200</b>	<b>73,523,532</b>	<b>82,311,681</b>	<b>90,059,039</b>
<b>EXPENSE</b>				
Power purchased.....	36,225,069	46,400,041	50,854,323	55,583,501
Local generation.....	83,884	263,958	290,579	322,179
Operation and maintenance.....	6,829,358	7,889,233	8,886,314	9,918,638
Administration.....	5,154,758	6,153,794	7,283,472	7,645,806
Fixed charges—interest and principal..	1,147,268	1,478,056	1,524,931	1,981,386
—depreciation.....	3,631,484	4,076,474	4,717,497	5,293,509
—other.....	634,690	1,769,378	87,225	71,211
Total expense.....	53,706,511	68,030,934	73,644,341	80,816,230
Net income or net expense.....	<b>3,196,689</b>	<b>5,492,598</b>	<b>8,667,340</b>	<b>9,242,809</b>
Number of customers.....	796,482	867,916	904,880	941,975

## CONSOLIDATED FINANCIAL STATEMENTS 1949-1958

1953	1954	1955	1956	1957	1958
332	338	343	350	351	354
\$ 214,595,382 <i>54,282,571</i>	\$ 243,525,700 <i>58,973,786</i>	\$ 367,090,752 <i>62,413,111</i>	\$ 298,832,207 <i>66,539,420</i>	\$ 327,925,974 <i>68,975,083</i>	\$ 349,706,161 <i>72,673,866</i>
160,312,811	184,551,914	204,677,641	232,292,787	258,950,891	277,032,295
4,884,136	7,376,869	9,277,807	9,858,536	10,819,896	10,769,037
10,716,659	16,361,137	17,392,469	15,512,896	14,174,408	13,333,906
10,298,699	10,695,799	9,939,403	12,776,466	12,573,922	13,911,267
25,899,494	34,433,805	36,609,679	38,147,898	37,568,226	38,014,210
7,527,844	7,413,229	7,900,466	9,681,858	9,579,584	17,237,653
410,806	383,454	383,751	290,682	561,622	1,033,436
2,393,860	3,465,797	2,323,308	2,399,184	1,894,582	2,214,392
10,332,510	11,262,480	10,607,525	12,371,724	12,035,788	20,485,481
140,068,857	152,461,822	167,250,921	183,262,708	200,293,236	218,736,441
<b>336,613,672</b>	<b>382,710,021</b>	<b>419,145,766</b>	<b>466,075,117</b>	<b>508,848,141</b>	<b>554,268,427</b>
29,827,723	45,645,051	49,776,907	58,528,557	63,315,360	69,363,792
10,943,035	11,090,473	10,574,522	11,633,156	11,226,905	10,105,465
2,224,181	2,843,742	3,493,146	3,910,276	4,207,237	6,175,200
42,994,939	59,579,266	63,844,575	74,071,989	78,749,502	85,644,457
140,068,857	152,461,822	167,250,921	183,262,708	200,293,236	218,736,441
8,153,001	8,095,705	7,765,477	6,948,236	5,658,849	3,507,375
148,221,858	160,557,527	175,016,398	190,210,944	205,952,085	222,243,816
61,417,714	64,210,220	66,488,672	69,338,990	72,087,556	75,021,200
410,806	383,454	383,751	290,682	561,622	1,033,436
83,934,775	98,687,493	114,727,112	132,983,134	152,057,614	170,871,551
<i>366,420</i>	<i>707,939</i>	<i>1,314,742</i>	<i>820,622</i>	<i>560,238</i>	<i>546,033</i>
145,396,875	162,573,228	180,284,793	201,792,184	224,146,554	246,380,154
<b>336,613,672</b>	<b>382,710,021</b>	<b>419,145,766</b>	<b>466,075,117</b>	<b>508,848,141</b>	<b>554,268,427</b>
107,997,010	119,510,834	129,810,298	142,629,092	151,855,664	160,700,759
1,257,311	1,345,281	1,457,199	1,554,347	1,580,224	1,723,986
<b>109,254,321</b>	<b>120,856,115</b>	<b>131,267,497</b>	<b>144,183,439</b>	<b>153,435,888</b>	<b>162,424,745</b>
69,750,630	75,589,512	79,779,898	87,344,024	92,682,089	98,563,451
319,744	426,606	459,594	501,386	575,771	509,240
10,674,897	11,527,269	12,076,620	13,406,955	14,362,587	15,544,060
8,236,239	9,299,705	9,896,805	11,015,893	12,086,583	13,654,386
2,400,468	3,242,705	4,216,877	4,744,936	5,504,842	6,175,773
5,832,594	6,547,361	7,193,495	7,709,546	8,389,004	9,216,594
147,083	141,824	144,121	59,374	53,525	13,060
<b>97,361,655</b>	<b>106,774,982</b>	<b>113,767,410</b>	<b>124,782,114</b>	<b>133,654,401</b>	<b>143,676,564</b>
<b>11,892,666</b>	<b>14,081,133</b>	<b>17,500,087</b>	<b>19,401,325</b>	<b>19,781,487</b>	<b>18,748,181</b>
986,144	1,045,742	1,089,835	1,153,371	1,192,357	1,255,805

## Municipal Electrical Utilities Financial

## Southern Ontario System

Municipality.....	Acton	Ailsa Craig	Ajax	Alexandria	Alfred	Alliston
Population.....	4,053	516	7,982	2,620	1,007	2,903
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	278,603	39,665	745,816	225,249	54,218	153,908
Accumulated depreciation.....	20,631	1,099	111,948	47,861	14,764	28,773
Net fixed assets.....	257,972	38,566	633,868	177,388	39,454	125,135
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	8,338	764	45,030	6,709	25,390	5,730
Investment in government securities	3,000			13,000		18,000
Accounts receivable.....	19,967	7	10,050	4,837	4,215	3,896
Total current assets.....	31,305	771	55,080	24,546	29,605	27,626
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation....	19,130	261	52,834	12,703		13,663
Sinking fund on local debentures....						
Miscellaneous.....	5,752	129	1,103	221	519	101
Total other assets.....	24,882	390	53,937	12,924	519	13,764
Equity in Ontario Hydro Systems....	310,528	46,858	30,497	110,591	3,007	106,737
	<b>624,687</b>	<b>86,585</b>	<b>773,382</b>	<b>325,449</b>	<b>72,585</b>	<b>273,262</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	64,400		328,000	7,418	34,000	
Accounts payable.....	1,500	370	380	205	1,616	
Other.....	7,332	205	53,222	2,813	2,864	3,971
Total liabilities.....	73,232	575	381,602	10,436	38,480	3,971
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	310,528	46,858	30,497	110,591	3,007	106,737
Other.....						104
Total reserves.....	310,528	46,858	30,497	110,591	3,007	106,841
<b>CAPITAL</b>						
Debentures redeemed.....	20,100	6,883	22,000	45,882	4,000	29,990
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds....	220,827	32,269	339,283	158,540	27,098	132,460
Frequency standardization expense charged this year.....						
Total capital.....	240,927	39,152	361,283	204,422	31,098	162,450
	<b>624,687</b>	<b>86,585</b>	<b>773,382</b>	<b>325,449</b>	<b>72,585</b>	<b>273,262</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	199,750	17,774	319,472	78,729	23,914	91,818
Other.....	897	45	4,345	4,640	574	840
Total revenue.....	<b>200,647</b>	<b>17,819</b>	<b>323,817</b>	<b>83,369</b>	<b>24,488</b>	<b>92,658</b>
<b>EXPENSE</b>						
Power purchased.....	135,939	10,841	154,876	51,637	11,147	58,539
Local generation.....						
Operation and maintenance.....	15,486	1,785	24,059	5,431	757	12,566
Administration.....	11,157	958	47,421	7,879	2,165	7,473
Fixed charges—interest and principal	5,603		29,624	2,081	3,163	
—depreciation.....	5,757	917	16,694	6,123	1,573	4,053
—other.....						
Total expense.....	<b>173,942</b>	<b>14,501</b>	<b>272,674</b>	<b>73,151</b>	<b>18,805</b>	<b>82,631</b>
Net income or net expense.....	<b>26,705</b>	<b>3,318</b>	<b>51,143</b>	<b>10,218</b>	<b>5,683</b>	<b>10,027</b>
Number of customers.....	1,297	225	2,149	835	294	1,015



Statements for the Year Ended December 31, 1958

Almonte	Alvinston	Amherst- burg	Ancaster Twp.	Apple Hill	Arkona	Arnprior	Arthur	Athens
3,164	641	4,504	13,189	400	440	5,407	1,203	943
\$ 349,680 77,420	\$ 54,801 13,771	\$ 327,387 69,028	\$ 230,210 26,545	\$ 20,996 3,948	\$ 39,312 8,608	\$ 390,254 37,455	\$ 78,987 20,017	\$ 54,941 8,127
272,260	41,030	258,359	203,665	17,048	30,704	352,799	58,970	46,814
2,470	2,178	25	2,857	4,474	3,476	39,978	584	.....
52,000	3,500	17,824	.....	4,000	4,000	.....	23,871	21,000
2,309	408	2,325	131	231	157	625	957	6,073
56,779	6,086	20,174	2,988	8,705	7,633	40,603	25,412	27,073
15,840	315	16,425	6,081	.....	34	4,435	1,376	1,044
.....	318	29	864	.....	.....	360	1,065	.....
15,840	633	16,454	6,945	.....	34	4,795	2,441	1,044
36,426	46,036	241,574	91,574	10,877	25,022	149,300	66,223	26,838
<b>381,305</b>	<b>93,785</b>	<b>536,561</b>	<b>305,172</b>	<b>36,630</b>	<b>63,393</b>	<b>547,497</b>	<b>153,046</b>	<b>101,769</b>
.....	.....	24,100	88,075	3,222	.....	52,733	.....	.....
4,980	564	1,241	690	.....	345	8,886	396	6,051
1,003	1,561	4,056	1,708	36	228	8,758	678	250
5,983	2,125	29,397	90,473	3,258	573	70,377	1,074	6,301
36,426	46,036	241,574	91,574	10,877	25,022	149,300	66,223	26,838
1,934	33	438	.....	.....	.....	.....	.....	206
38,360	46,069	242,012	91,574	10,877	25,022	149,300	66,223	27,044
72,000	23,530	44,431	41,036	5,080	13,113	72,736	23,913	12,988
.....	.....	.....	.....	.....	.....	.....	.....	.....
264,962	22,061	220,721	82,089	17,415	24,685	255,084	61,836	55,436
.....	.....	.....	.....	.....	.....	.....	.....	.....
336,962	45,591	265,152	123,125	22,495	37,798	327,820	85,749	68,424
<b>381,305</b>	<b>93,785</b>	<b>536,561</b>	<b>305,172</b>	<b>36,630</b>	<b>63,393</b>	<b>547,497</b>	<b>153,046</b>	<b>101,769</b>
95,297	16,620	190,680	115,682	6,070	15,466	177,875	34,623	15,217
4,046	116	2,290	688	209	148	2,927	873	908
<b>99,343</b>	<b>16,736</b>	<b>192,970</b>	<b>116,370</b>	<b>6,279</b>	<b>15,614</b>	<b>180,802</b>	<b>35,496</b>	<b>16,125</b>
39,335	9,696	127,621	69,185	2,291	9,981	124,080	24,047	11,099
15,242	.....	.....	.....	.....	.....	.....	.....	.....
9,196	1,610	17,875	15,257	722	992	6,446	4,374	967
9,386	2,006	14,708	8,444	670	1,155	15,195	2,647	1,296
.....	196	4,982	9,056	.....	10	6,619	.....	49
9,064	1,573	8,572	5,340	514	1,078	8,832	2,330	1,350
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>82,223</b>	<b>15,081</b>	<b>173,758</b>	<b>107,282</b>	<b>4,197</b>	<b>13,216</b>	<b>161,172</b>	<b>33,398</b>	<b>14,761</b>
<b>17,120</b>	<b>1,655</b>	<b>19,212</b>	<b>9,088</b>	<b>2,082</b>	<b>2,398</b>	<b>19,630</b>	<b>2,098</b>	<b>1,364</b>
1,039	316	1,387	1,100	123	188	1,694	476	336

# Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Aurora	Aylmer	Ayr	Baden	Bancroft	Barrie
Population.....	4,371	4,411	969	803	2,612	20,243
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	296,523	267,245	69,316	60,108	247,688	1,346,033
Accumulated depreciation.....	58,523	73,662	12,218	8,701	52,576	346,542
Net fixed assets.....	238,000	193,583	57,098	51,407	195,112	999,491
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	24,872	24,425		4,319	43,347	41,709
Investment in government securities.....			10,500	6,500		
Accounts receivable.....	2,462	4,035	568	1,782	1,512	14,499
Total current assets.....	27,334	28,460	11,068	12,601	44,859	56,208
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equipment at cost less depreciation..	17,746	8,386	274	1,317	4,773	36,108
Sinking fund on local debentures.....					1,003	452
Miscellaneous.....	107	25,705	7,430			
Total other assets.....	17,853	34,091	7,704	1,317	5,776	36,560
Equity in Ontario Hydro Systems....	120,307	214,579	57,782	102,263	14,625	726,780
	<b>403,494</b>	<b>470,713</b>	<b>133,652</b>	<b>167,588</b>	<b>260,372</b>	<b>1,819,039</b>
<b>LIABILITIES</b>						
Debentures outstanding.....		45,500			86,000	
Accounts payable.....	4,353	2,316	5,169	2,701	1,635	132
Other.....	5,528	3,265	268	180	1,851	18,063
Total liabilities.....	9,881	51,081	5,437	2,881	89,486	18,195
<b>RESERVES</b>						
Equity in Ontario Hydro Systems....	120,307	214,579	57,782	102,263	14,625	726,780
Other.....	130	337				500
Total reserves.....	120,437	214,916	57,782	102,263	14,625	727,280
<b>CAPITAL</b>						
Debentures redeemed.....		43,202	17,503	5,000	46,500	65,366
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds..	273,176	161,514	52,930	57,444	109,761	1,008,198
Frequency standardization expense charged this year.....						
Total capital.....	273,176	204,716	70,433	62,444	156,261	1,073,564
	<b>403,494</b>	<b>470,713</b>	<b>133,652</b>	<b>167,588</b>	<b>260,372</b>	<b>1,819,039</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	172,955	186,967	35,087	34,383	83,245	700,758
Other.....	5,133	962	630	195	3,287	6,467
Total revenue.....	<b>178,088</b>	<b>187,929</b>	<b>35,717</b>	<b>34,578</b>	<b>86,532</b>	<b>707,225</b>
<b>EXPENSE</b>						
Power purchased.....	120,220	128,890	24,629	26,583	54,237	433,095
Local generation.....						
Operation and maintenance.....	13,429	11,143	2,632	2,486	7,341	79,498
Administration.....	15,467	10,211	1,929	1,784	5,950	53,548
Fixed charges—interest and principal.....		5,260	200	7	4,272	
—depreciation.....	7,403	7,739	1,772	1,478	6,255	38,341
—other.....						
Total expense.....	<b>156,519</b>	<b>163,243</b>	<b>31,162</b>	<b>32,338</b>	<b>78,055</b>	<b>604,482</b>
Net income or net expense.....	<b>21,569</b>	<b>24,686</b>	<b>4,555</b>	<b>2,240</b>	<b>8,477</b>	<b>102,743</b>
Number of customers.....	1,665	1,591	362	266	780	6,142

## Statements for the Year Ended December 31, 1958

Barry's Bay	Bath	Beachville	Beamsville	Beaverton	Beeton	Belle River	Belleville	Blenheim
1,479	676	818	2,291	1,111	739	1,830	28,032	2,860
\$ 76,714 3,416	\$ 53,553 9,921	\$ 71,015 21,175	\$ 113,857 22,362	\$ 95,801 17,835	\$ 60,369 6,253	\$ 95,726 19,357	\$ 1,188,352 223,129	\$ 261,156 34,502
73,298	43,632	49,840	91,495	77,966	54,116	76,369	965,223	226,654
11,674	5,439	25,930	50	1,865	2,118	11,329	67,518	22,382
.....	.....	25,000	4,000	.....	1,500	2,000	205,000	.....
357	483	858	369	149	245	396	45,202	1,100
12,031	5,922	51,788	4,419	2,014	3,863	13,725	317,720	23,482
531	179	388	.....	718	133	4,025	73,892	2,811
.....	.....	8	.....	.....	1,115	.....	.....	42
531	179	396	.....	718	1,248	4,025	73,892	2,853
7,122	12,707	154,984	62,086	75,420	48,751	49,417	959,783	140,532
<b>92,982</b>	<b>62,440</b>	<b>257,008</b>	<b>158,000</b>	<b>156,118</b>	<b>107,978</b>	<b>143,536</b>	<b>2,316,618</b>	<b>393,521</b>
.....	9,000	.....	.....	.....	.....	6,600	.....	64,720
602	520	9,430	1,772	798	.....	2,373	.....	.....
260	728	380	1,168	655	969	1,355	31,659	931
862	10,248	9,810	2,940	1,453	969	10,328	31,659	65,651
7,122	12,707	154,984	62,086	75,420	48,751	49,417	959,783	140,532
.....	.....	197	.....	370	87	15	3,082	6,450
<b>7,122</b>	<b>12,707</b>	<b>155,181</b>	<b>62,086</b>	<b>75,790</b>	<b>48,838</b>	<b>49,432</b>	<b>962,865</b>	<b>146,982</b>
7,500	8,500	5,537	37,500	12,839	13,610	13,900	174,997	33,280
.....	.....	.....	.....	.....	.....	.....	.....	.....
77,498	30,985	90,737	55,474	66,036	44,561	69,876	1,147,097	151,186
.....	.....	4,257	.....	.....	.....	.....	.....	3,578
84,998	39,485	92,017	92,974	78,875	58,171	83,776	1,322,094	180,888
<b>92,982</b>	<b>62,440</b>	<b>257,008</b>	<b>158,000</b>	<b>156,118</b>	<b>107,978</b>	<b>143,536</b>	<b>2,316,618</b>	<b>393,521</b>
24,102	17,814	107,696	75,644	56,948	26,526	46,521	675,997	94,715
90	5	1,325	128	227	40	152	25,277	2,576
<b>24,192</b>	<b>17,819</b>	<b>109,021</b>	<b>75,772</b>	<b>57,175</b>	<b>26,566</b>	<b>46,673</b>	<b>701,274</b>	<b>97,291</b>
10,772	9,228	92,130	52,583	39,612	16,354	24,789	474,447	48,412
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,440	970	4,395	3,483	3,882	2,485	7,092	58,233	6,486
2,006	1,817	1,670	5,462	3,929	1,687	5,562	60,752	14,205
11	852	.....	.....	.....	.....	1,560	.....	8,444
1,612	1,403	2,192	3,010	2,513	1,411	2,658	31,080	6,194
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>15,841</b>	<b>14,270</b>	<b>100,387</b>	<b>64,538</b>	<b>49,936</b>	<b>21,937</b>	<b>41,661</b>	<b>624,512</b>	<b>83,741</b>
<b>8,351</b>	<b>3,549</b>	<b>8,634</b>	<b>11,234</b>	<b>7,239</b>	<b>4,629</b>	<b>5,012</b>	<b>76,762</b>	<b>13,550</b>
390	234	282	789	525	304	657	7,162	1,082



Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Bloomfield	Blyth	Bobcaygeon	Bolton	Bothwell	Bowman- ville
Population.....	744	733	1,184	1,556	807	7,112
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	54,616	61,124	206,965	126,913	48,251	584,959
Accumulated depreciation.....	16,717	7,820	53,243	16,172	15,419	156,586
Net fixed assets.....	37,899	53,304	153,722	110,741	32,832	428,373
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	3,644	10,013	100	5,211	4,413	18,252
Investment in government securities	11,993	2,000	.....	.....	6,000	119,139
Accounts receivable.....	248	266	513	2,320	754	4,038
Total current assets.....	15,885	12,279	613	7,531	11,167	141,429
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation.....	.....	238	6,425	2,447	108	25,632
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	11	.....	.....	1,857	4,593	346
Total other assets.....	11	238	6,425	4,304	4,701	25,978
Equity in Ontario Hydro Systems.....	29,314	43,187	18,160	63,649	53,559	365,072
	83,109	109,008	178,920	186,225	102,259	960,852
<b>LIABILITIES</b>						
Debentures outstanding.....	.....	.....	.....	53,452	.....	.....
Accounts payable.....	.....	.....	8,479	2,543	497	2,177
Other.....	646	242	295	3,166	107	2,906
Total liabilities.....	646	242	8,774	59,161	604	5,083
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	29,314	43,187	18,160	63,649	53,559	365,072
Other.....	.....	.....	.....	279	.....	125
Total reserves.....	29,314	43,187	18,160	63,928	53,559	365,197
<b>CAPITAL</b>						
Debentures redeemed.....	9,797	16,033	90,000	13,949	5,534	71,000
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	43,352	49,546	61,986	49,187	42,562	519,572
Frequency standardization expense charged this year.....	.....	.....	.....	.....	.....	.....
Total capital.....	53,149	65,579	151,986	63,136	48,096	590,572
	83,109	109,008	178,920	186,225	102,259	960,852
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	20,534	34,354	44,916	51,250	21,484	241,568
Other.....	472	66	743	81	524	5,010
Total revenue.....	21,006	34,420	45,659	51,331	22,008	246,578
<b>EXPENSE</b>						
Power purchased.....	11,983	23,166	21,734	32,215	14,227	170,195
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	1,391	1,923	6,368	4,149	1,408	24,561
Administration.....	2,038	1,576	5,703	4,011	1,574	20,174
Fixed charges—interest and principal	.....	4	5,012	3,337	.....	.....
—depreciation.....	1,004	1,470	2,768	2,717	905	16,987
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	16,416	28,139	41,585	46,429	18,114	231,917
Net income or net expense.....	4,590	6,281	4,074	4,902	3,894	14,661
Number of customers.....	307	328	675	561	317	2,365

Statements for the Year Ended December 31, 1958

Bracebridge	Bradford	Braeside	Brampton	Brantford	Brantford Twp.	Brechin	Bridgeport	Brigden
2,802	2,212	510	14,374	52,668	6,722	219	1,602	525
\$ 785,193 182,149	\$ 192,428 25,253	\$ 28,182 771	\$ 1,097,289 100,768	\$ 4,312,374 994,178	\$ 805,310 215,256	\$ 17,090 2,419	\$ 78,678 15,735	\$ 40,029 9,658
603,044	167,175	27,411	996,521	3,318,196	590,054	14,671	62,943	30,371
6,049	14,061	93	6,286	8,770	46,574	1,226	5,183	7,873
.....	8,000	.....	1,500	22,000	54,781	7,000	5,000	.....
9,392	4,541	2,500	7,860	54,850	3,955	218	521	297
15,441	26,602	2,593	15,646	85,620	105,310	8,444	10,704	8,170
33,090	24,842	.....	40,037	151,582	50,414	143	330	98
.....	994	.....	470	9,763	7,837	.....	880	34
34,084	25,403	150	40,507	161,345	58,251	143	1,210	132
1,500	82,788	12,787	658,894	3,757,535	153,920	21,127	37,757	36,590
654,069	301,968	42,941	1,711,568	7,322,696	907,535	44,385	112,614	75,263
282,003	.....	2,314	307,000	631,087	526,469	.....	18,278	.....
617	.....	442	12,292	78,080	3,634	700	154	95
1,170	2,303	190	10,598	70,860	17,958	100	1,694	115
283,790	2,303	2,946	329,890	780,027	548,061	800	20,126	210
1,500	82,788	12,787	658,894	3,757,535	153,920	21,127	37,757	36,590
.....	73	.....	799	2,814	.....	54	.....	.....
1,500	82,861	12,787	659,693	3,760,349	153,920	21,181	37,757	36,590
223,797	23,351	3,686	112,051	822,027	42,543	2,664	14,090	8,000
.....	.....	.....	.....	.....	.....	.....	.....	.....
144,982	193,453	23,522	609,934	2,145,876	185,686	19,740	40,641	30,463
.....	.....	.....	.....	185,583	22,675	.....	.....	.....
368,779	216,804	27,208	721,985	2,782,320	205,554	22,404	54,731	38,463
654,069	301,968	42,941	1,711,568	7,322,696	907,535	44,385	112,614	75,263
123,244	84,434	17,852	491,514	2,024,667	351,714	6,766	39,484	15,051
4,445	1,076	299	2,335	3,169	4,857	331	391	117
127,689	85,510	18,151	493,849	2,027,836	356,571	7,097	39,875	15,168
1,189	50,082	12,025	310,787	1,406,032	162,525	5,150	25,102	8,659
36,049	.....	.....	.....	.....	.....	.....	.....	.....
17,535	13,756	616	19,691	127,473	33,406	710	2,675	1,681
10,352	6,791	901	19,878	81,850	25,797	653	4,410	1,402
28,960	.....	450	26,828	69,253	42,793	78	1,533	.....
16,469	4,574	548	23,661	119,359	23,296	414	2,026	1,123
.....	.....	.....	.....	.....	.....	.....	.....	.....
110,554	75,203	14,540	400,845	1,803,967	287,817	7,005	35,746	12,865
17,135	10,307	3,611	93,004	223,869	68,754	92	4,129	2,303
1,242	770	153	4,446	16,437	1,953	95	406	220

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Brighton	Brockville	Bronte	Brussels	Burford	Burgess- ville
Population.....	2,256	15,701	2,254*	808	1,041	248
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	154,485	1,233,530	125,935	63,934	63,973	19,987
Accumulated depreciation.....	12,474	308,592	8,415	6,861	17,518	6,237
Net fixed assets.....	142,011	924,938	117,520	57,073	46,455	13,750
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	50	.....	1,591	3,813	4,633	84
Investment in government securities	10,000	12,000	.....	.....	3,500	1,500
Accounts receivable.....	767	17,289	2,005	129	829	538
Total current assets.....	10,817	29,289	3,596	3,942	8,962	2,122
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	12,447	53,759	11,765	418	344	217
Sinking fund on local debentures..	.....	.....	.....	.....	.....	.....
Miscellaneous.....	.....	2,311	904	.....	6,334	50
Total other assets.....	12,447	56,070	12,669	418	6,678	267
Equity in Ontario Hydro Systems....	70,918	839,260	16,263	52,659	56,373	18,886
	236,193	1,849,557	150,048	114,092	118,468	35,025
<b>LIABILITIES</b>						
Debentures outstanding.....	.....	88,000	31,300	.....	12,000	.....
Accounts payable.....	1,395	24,434	4,239	3,005	216	27
Other.....	2,811	10,765	3,021	203	1,161	.....
Total liabilities.....	4,206	123,199	38,560	3,208	13,377	27
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	70,918	839,260	16,263	52,659	56,373	18,886
Other.....	.....	752	162	.....	.....	.....
Total reserves.....	70,918	840,012	16,425	52,659	56,373	18,886
<b>CAPITAL</b>						
Debentures redeemed.....	25,000	179,270	7,407	21,000	9,000	3,500
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	136,069	707,076	87,656	37,225	39,718	13,838
Frequency standardization expense charged this year.....	.....	.....	.....	.....	.....	1,226
Total capital.....	161,069	886,346	95,063	58,225	48,718	16,112
	236,193	1,849,557	150,048	114,092	118,468	35,025
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	63,948	629,276	61,124	31,989	40,019	9,124
Other.....	555	8,965	4	10	199	69
Total revenue.....	64,503	638,241	61,128	31,999	40,218	9,193
<b>EXPENSE</b>						
Power purchased.....	41,418	412,300	32,460	22,596	25,642	6,594
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	5,756	69,716	6,032	1,041	3,660	520
Administration.....	7,908	55,368	6,606	2,769	1,981	321
Fixed charges—interest and principal	.....	9,482	3,305	.....	1,105	6
—depreciation.....	3,365	32,521	2,927	1,445	1,869	610
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	58,447	579,387	51,330	27,851	34,257	8,051
Net income or net expense.....	6,056	58,854	9,798	4,148	5,961	1,142
Number of customers.....	939	5,164	711	374	421	99

\*Population from assessment rolls



Statements for the Year Ended December 31, 1958

Burk's Falls	Burlington	Caledonia	Campbell- ville	Cannington	Cardinal	Carleton Place	Casselman	Cayuga
895	37,630	2,170	342	1,012	2,040	4,684	1,264	850
\$ 65,492 10,692	\$ 2,164,562 70,827	\$ 127,948 21,587	\$ 15,997 3,737	\$ 67,110 14,456	\$ 65,767 10,158	\$ 227,448 40,170	\$ 72,006 7,710	\$ 81,970 13,266
54,800	2,093,735	106,361	12,260	52,654	55,609	187,278	64,296	68,704
10,886	397,518	7,391	2,389	6,757	9,486	.....	13,501	860
.....	38,100	.....	500	6,000	1,500	15,000	14,000	12,500
926	69,826	798	466	385	562	5,070	.....	306
11,812	505,444	8,189	3,355	13,142	11,548	20,070	27,501	13,666
1,922	114,548	2,042	99	81	.....	11,014	619	1,498
5,291	100,762	11,857	.....	.....	829	272	4,838	.....
7,213	215,310	13,899	99	81	829	11,286	5,457	1,498
10,373	169,113	85,254	11,837	57,121	46,124	308,996	8,385	38,002
<b>84,198</b>	<b>2,983,602</b>	<b>213,703</b>	<b>27,551</b>	<b>122,998</b>	<b>114,110</b>	<b>527,630</b>	<b>105,639</b>	<b>121,870</b>
16,193	2,111,157	3,500	.....	.....	.....	14,680	54,500	.....
611	159,197	360	5	7,737	.....	8,830	.....	3,231
233	51,814	1,705	.....	385	15	3,295	10	786
17,037	2,322,168	5,565	5	8,122	15	26,805	54,510	4,017
10,373	169,113	85,254	11,837	57,121	46,124	308,996	8,385	38,002
.....	.....	.....	8	28	.....	245	.....	62
10,373	169,113	85,254	11,845	57,149	46,124	309,241	8,385	38,064
18,807	149,343	12,124	5,448	14,532	11,014	58,617	15,500	20,000
.....	.....	.....	.....	.....	.....	.....	.....	.....
37,981	342,978	110,760	10,253	43,195	56,957	132,967	27,244	65,053
.....	.....	.....	.....	.....	.....	.....	.....	5,264
56,788	492,321	122,884	15,701	57,727	67,971	191,584	42,744	79,789
<b>84,198</b>	<b>2,983,602</b>	<b>213,703</b>	<b>27,551</b>	<b>122,998</b>	<b>114,110</b>	<b>527,630</b>	<b>105,639</b>	<b>121,870</b>
29,491	458,462	58,774	7,956	33,993	45,814	162,497	36,448	25,784
334	3,311	112	82	274	241	1,386	706	876
<b>29,825</b>	<b>461,773</b>	<b>58,886</b>	<b>8,038</b>	<b>34,267</b>	<b>46,055</b>	<b>163,883</b>	<b>37,154</b>	<b>26,660</b>
15,378	307,567	32,999	5,325	23,127	31,406	101,184	19,441	13,997
.....	.....	.....	.....	.....	.....	.....	.....	.....
2,401	32,304	5,233	380	2,684	2,949	16,232	1,196	6,271
3,081	91,336	6,053	356	2,445	3,266	21,607	2,615	4,596
3,043	35,320	1,204	.....	.....	.....	1,473	5,877	55
1,632	14,548	3,185	440	1,856	1,601	5,919	1,699	2,111
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>25,535</b>	<b>481,075</b>	<b>48,674</b>	<b>6,501</b>	<b>30,112</b>	<b>39,222</b>	<b>146,415</b>	<b>30,828</b>	<b>27,030</b>
<b>4,290</b>	<b>19,302</b>	<b>10,212</b>	<b>1,537</b>	<b>4,155</b>	<b>6,833</b>	<b>17,468</b>	<b>6,326</b>	<b>370</b>
325	12,033	764	84	439	631	1,667	360	351

Municipal Electrical Utilities Financial  
Southern Ontario System—Continued

Municipality.....	Chalk River 986	Chatham	Chatsworth	Chesley	Chesterville	Chippawa
Population.....		22,352	394	1,650	1,229	2,380
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	51,926	2,247,882	28,776	100,117	62,130	145,008
Accumulated depreciation.....	9,637	450,438	7,014	31,344	14,207	27,817
Net fixed assets.....	52,289	1,797,444	21,762	68,773	47,923	117,191
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	10,137	50,799	3,470	8,403	20,356	6,116
Investment in government securities.....		140,000	6,000	17,000	6,000	
Accounts receivable.....	4,916	384,553	278	562	2,437	42,961
Total current assets.....	15,053	575,352	9,748	25,965	28,793	49,077
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	1,061	254,807	228	2,841	748	1,412
Sinking fund on local debentures..						
Miscellaneous.....	2,633	3,527			500	
Total other assets.....	3,694	258,334	228	2,841	1,248	1,412
Equity in Ontario Hydro Systems....	6,799	1,511,245	20,784	130,896	96,228	66,538
	77,835	4,142,375	52,522	228,475	174,192	234,218
<b>LIABILITIES</b>						
Debentures outstanding.....	52,000	816,474				35,000
Accounts payable.....		150,661	371	40	3,855	2,907
Other.....	160	16,795	140		142	31,500
Total liabilities.....	52,160	983,930	511	40	3,997	69,407
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	6,799	1,511,245	20,784	130,896	96,228	66,538
Other.....		63,576				35
Total reserves.....	6,799	1,574,821	20,784	130,896	96,228	66,573
<b>CAPITAL</b>						
Debentures redeemed.....	3,000	703,526	5,014	24,410	5,889	13,350
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.	15,876	880,098	26,213	73,129	68,078	84,888
Frequency standardization expense charged this year.....						
Total capital.....	18,876	1,583,624	31,227	97,539	73,967	98,238
	77,835	4,142,375	52,522	228,475	174,192	234,218
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	27,870	1,147,137	13,268	56,461	55,861	57,078
Other.....	3	12,673	234	552	376	532
Total revenue.....	27,873	1,159,810	13,502	57,013	56,237	57,610
<b>EXPENSE</b>						
Power purchased.....	11,240	544,133	9,920	39,832	40,076	34,361
Local generation.....						
Operation and maintenance.....	1,009	250,977	1,385	3,673	4,537	3,543
Administration.....	1,866	154,396	1,043	5,193	2,608	4,467
Fixed charges—interest and principal	4,451	74,468				785
—depreciation.....	1,544	58,229	798	3,160	1,720	3,636
—other.....						
Total expense.....	20,110	1,082,203	13,146	51,858	48,941	46,792
Net income or net expense.....	7,763	77,607	356	5,155	7,296	10,818
Number of customers.....	267	7,495	166	702	441	891

## Statements for the Year Ended December 31, 1958

Clifford 538	Clinton 2,970	Cobden 877	Cobourg 8,919	Colborne 1,228	Coldwater 720	Colling- wood 8,302	Comber 570	Cookstown 662
\$ 40,136 5,202	\$ 218,173 35,655	\$ 55,465 6,131	\$ 777,274 156,131	\$ 80,477 7,868	\$ 50,096 11,329	\$ 442,676 85,431	\$ 48,497 10,096	\$ 45,619 6,992
34,934	182,518	49,334	621,143	72,609	38,767	357,245	38,401	38,627
4,747	58,067	5,488	57,532	1,304	8,242	36,449	2,182	8,266
3,000	.....	18,000	10,000	.....	12,500	11,000	.....	.....
382	916	710	25,443	2,774	1,000	3,512	232	226
8,129	58,983	24,198	92,975	4,078	21,742	50,961	2,414	8,492
184	6,956	981	33,854	13,507	420	36,435	712	125
16	2,037	.....	387	.....	.....	31	4	419
200	8,993	981	34,241	13,507	420	36,466	716	544
30,123	179,830	21,422	370,286	39,100	46,181	512,760	54,566	22,861
<b>73,386</b>	<b>430,324</b>	<b>95,935</b>	<b>1,118,645</b>	<b>129,294</b>	<b>107,110</b>	<b>957,432</b>	<b>96,097</b>	<b>70,524</b>
6,424	63,300	.....	.....	.....	.....	.....	2,940	.....
1,006	432	.....	52,672	9,864	64	1,198	.....	352
336	8,129	125	11,459	3,368	155	6,613	209	500
7,766	71,861	125	64,131	13,232	219	7,811	3,149	852
30,123	179,830	21,422	370,286	39,100	46,181	512,760	54,566	22,861
.....	89	.....	.....	.....	136	100	25	93
30,123	179,919	21,422	370,286	39,100	46,317	512,860	54,591	22,954
8,521	60,200	4,949	105,994	12,195	6,867	38,183	9,760	12,001
.....	.....	.....	.....	.....	.....	.....	.....	.....
26,976	118,344	69,439	578,234	64,767	53,707	398,578	30,982	34,717
.....	.....	.....	.....	.....	.....	.....	2,385	.....
35,497	178,544	74,388	684,228	76,962	60,574	436,761	38,357	46,718
<b>73,386</b>	<b>430,324</b>	<b>95,935</b>	<b>1,118,645</b>	<b>129,294</b>	<b>107,110</b>	<b>957,432</b>	<b>96,097</b>	<b>70,524</b>
20,024	125,718	23,007	430,996	44,182	26,582	299,913	19,963	17,642
558	2,433	347	1,438	1,071	551	2,177	8	104
<b>20,582</b>	<b>128,151</b>	<b>23,354</b>	<b>432,434</b>	<b>45,253</b>	<b>27,133</b>	<b>302,090</b>	<b>19,971</b>	<b>17,746</b>
13,746	74,807	15,960	270,733	26,740	17,342	218,212	10,892	12,247
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,885	10,998	1,184	22,617	2,713	2,135	19,538	1,487	1,111
1,299	10,433	1,887	32,570	6,243	1,618	16,711	2,555	1,097
567	6,735	.....	1,932	241	22	.....	419	.....
985	5,556	1,279	19,801	1,745	1,422	11,242	1,293	1,142
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>18,482</b>	<b>108,529</b>	<b>20,310</b>	<b>347,653</b>	<b>37,682</b>	<b>22,539</b>	<b>265,703</b>	<b>16,646</b>	<b>15,597</b>
<b>2,100</b>	<b>19,622</b>	<b>3,044</b>	<b>84,781</b>	<b>7,571</b>	<b>4,594</b>	<b>36,387</b>	<b>3,325</b>	<b>2,149</b>
216	1,153	370	3,126	529	257	2,933	235	246



Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Cottam	Courtright	Creemore	Dashwood	Deep River	Delaware
Population.....	629	567	884	382	4,403	419
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>						
Plant and facilities at cost.....	\$ 48,863	\$ 23,852	\$ 42,042	\$ 26,688	\$ 530,358	\$ 20,400
Accumulated depreciation.....	10,139	4,139	7,089	4,000	76,045	6,407
Net fixed assets.....	38,724	19,713	34,953	22,688	454,313	13,993
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	1,858	1,330	2,561	1,024	11,817	3,230
Investment in government securities	3,000	4,000	10,000			
Accounts receivable.....	105	291	744	96	18,423	303
Total current assets.....	4,963	5,621	13,305	1,120	30,240	3,533
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	378	159	548		25,913	55
Sinking fund on local debentures..						
Miscellaneous.....	107	3,034	300		6,367	150
Total other assets.....	485	3,193	848		32,280	205
Equity in Ontario Hydro Systems....	19,597	19,371	42,099	30,838		15,969
	63,769	47,898	91,205	54,646	516,833	33,700
<b>LIABILITIES</b>						
Debentures outstanding.....	3,000				195,000	
Accounts payable.....	229	2,830	790	341	14,726	349
Other.....	652	397	619		8,472	30
Total liabilities.....	3,881	3,227	1,409	341	218,198	379
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	19,597	19,371	42,099	30,838		15,969
Other.....	26	80	58			23
Total reserves.....	19,623	19,451	42,157	30,838		15,992
<b>CAPITAL</b>						
Debentures redeemed.....	11,000	8,138	2,824	3,400		4,000
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.	29,265	17,082	44,815	20,067	298,635	13,329
Frequency standardization expense charged this year.....						
Total capital.....	40,265	25,220	47,639	23,467	298,635	17,329
	63,769	47,898	91,205	54,646	516,833	33,700
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	13,991	8,287	24,159	13,779	53,180	12,961
Other.....	120	237	302	3	70	2
Total revenue.....	14,111	8,524	24,461	13,782	53,250	12,963
<b>EXPENSE</b>						
Power purchased.....	7,986	6,285	17,352	10,158	38,802	8,454
Local generation.....						
Operation and maintenance.....	1,213	1,162	2,130	2,260	7,318	1,135
Administration.....	1,583	998	1,599	1,448	6,755	1,139
Fixed charges—interest and principal	646				7,518	1
—depreciation	1,279	611	1,080	630	5,594	634
—other.....						
Total expense.....	12,707	9,056	22,161	14,496	65,987	11,363
Net income or net expense.....	1,404	532	2,300	714	12,737	1,600
Number of customers.....	234	195	356	174	1,264	137

## Statements for the Year Ended December 31, 1958

Delhi	Deseronto	Dorchester	Drayton	Dresden	Drumbo	Dublin	Dundalk	Dundas
3,189	1,798	800	586	2,203	352	256	853	10,597
\$ 248,855 46,622	\$ 107,525 23,534	\$ 49,962 10,484	\$ 46,264 8,468	\$ 150,847 20,038	\$ 27,101 9,555	\$ 30,336 6,173	\$ 48,603 10,844	\$ 646,147 128,918
202,233	83,991	39,478	37,796	130,809	17,546	24,163	37,759	517,229
952	1,398	1,754	4,894	13,451	2,098	1,257	8,816	17,059
10,000	16,000	1,500	6,000	21,000	5,500	1,300	6,500	9,000
2,033	5,123	194	221	3,810	994	34	414	4,933
12,985	22,521	3,448	11,115	38,261	8,592	2,591	15,730	30,992
30,378	13,255	323	549	10,198	.....	.....	339	29,294
29	724	.....	.....	11,089	2,541	.....	.....	281
30,407	13,979	323	549	21,287	2,541	.....	339	29,575
81,495	48,005	29,061	43,048	119,727	24,865	18,983	49,921	522,690
<b>327,120</b>	<b>168,496</b>	<b>72,310</b>	<b>92,508</b>	<b>310,084</b>	<b>53,544</b>	<b>45,737</b>	<b>103,749</b>	<b>1,100,486</b>
4,010	.....	2,499	.....	25,981	.....	.....	.....	173,100
8,378	171	223	286	802	97	51	76	8,862
3,985	1,168	303	25	2,768	106	55	50	12,748
16,373	1,339	3,025	311	29,551	203	106	126	194,710
81,495	48,005	29,061	43,048	119,727	24,865	18,983	49,921	522,690
75	.....	.....	.....	568	.....	.....	.....	281
81,570	48,005	29,061	43,048	120,295	24,865	18,983	49,921	522,971
80,990	15,000	4,801	9,500	25,442	4,500	6,200	5,727	74,900
.....	.....	.....	.....	.....	.....	.....	.....	.....
167,040	104,152	35,423	39,649	134,796	23,976	20,448	47,975	307,905
18,853	.....	.....	.....	.....	.....	.....	.....	.....
229,177	119,152	40,224	49,149	160,238	28,476	26,648	53,702	382,805
<b>327,120</b>	<b>168,496</b>	<b>72,310</b>	<b>92,508</b>	<b>310,084</b>	<b>53,544</b>	<b>45,737</b>	<b>103,749</b>	<b>1,100,486</b>
138,627	48,595	18,698	20,514	77,960	11,933	12,790	30,962	358,891
1,583	1,080	241	185	3,485	233	42	211	1,280
<b>140,210</b>	<b>49,675</b>	<b>18,939</b>	<b>20,699</b>	<b>81,445</b>	<b>12,166</b>	<b>12,832</b>	<b>31,173</b>	<b>360,171</b>
82,568	32,342	12,485	11,891	43,649	8,992	7,829	19,037	213,086
.....	.....	.....	.....	.....	.....	.....	.....	.....
10,519	5,432	689	980	10,806	441	628	3,637	51,021
12,367	6,749	1,917	1,696	15,101	979	902	2,910	24,140
6,158	.....	244	11	3,921	2	.....	.....	14,921
6,347	2,947	1,340	1,281	3,609	541	832	1,354	17,042
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>117,959</b>	<b>47,470</b>	<b>16,675</b>	<b>15,859</b>	<b>77,086</b>	<b>10,955</b>	<b>10,191</b>	<b>26,938</b>	<b>320,210</b>
22,251	2,205	2,264	4,840	4,359	1,211	2,641	4,235	39,961
1,288	633	306	266	885	163	112	405	3,356

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Dunnville	Durham	Dutton	East York Twp.	Eganville	Elmira
Population.....	5,092	2,065	783	68,312	1,570	2,890
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>						
Plant and facilities at cost.....	\$ 328,119	\$ 128,008	\$ 41,149	\$ 3,394,391	\$ 148,038	\$ 299,906
Accumulated depreciation.....	59,758	14,631	14,325	491,414	32,258	66,243
Net fixed assets.....	268,361	113,377	26,824	2,902,977	115,780	233,663
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	16,260	10,298	2,833	215,545	6,368	7,293
Investment in government securities.....		4,000	5,500	400,000	10,000	
Accounts receivable.....	2,265	699	584	113,555	317	1,026
Total current assets.....	18,525	14,997	8,917	729,100	16,685	8,319
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation.....	41,611	5,036	232	81,904	5,107	5,521
Sinking fund on local debentures.....				54,645		
Miscellaneous.....	1,056		4,841	8,585	1,993	203
Total other assets.....	42,667	5,036	5,073	145,134	7,100	5,724
Equity in Ontario Hydro Systems.....	269,290	111,201	63,029	1,731,902	4,992	292,872
	598,843	244,611	103,843	5,509,113	144,557	540,578
<b>LIABILITIES</b>						
Debentures outstanding.....	57,610			676,017	52,447	
Accounts payable.....	9,009	126	1,918	146,454		1,060
Other.....	6,676	1,079	262	42,871		1,904
Total liabilities.....	73,295	1,205	2,180	865,342	52,447	2,964
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	269,290	111,201	63,029	1,731,902	4,992	292,872
Other.....				13,661		
Total reserves.....	269,290	111,201	63,029	1,745,563	4,992	292,872
<b>CAPITAL</b>						
Debentures redeemed.....	82,890	25,324	8,408	602,715	47,553	37,169
Local sinking fund.....				54,645		
Accumulated net income invested in plant or held as working funds.....	173,368	106,881	30,226	2,240,848	39,565	207,573
Frequency standardization expense charged this year.....						
Total capital.....	256,258	132,205	38,634	2,898,208	87,118	244,742
	598,843	244,611	103,843	5,509,113	144,557	540,578
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	211,078	83,622	21,181	1,804,901	47,310	163,136
Other.....	692	535	100	15,886	381	1,119
Total revenue.....	211,770	84,157	21,281	1,820,787	47,691	164,255
<b>EXPENSE</b>						
Power purchased.....	137,620	52,118	14,930	1,255,832	14,125	121,222
Local generation.....					10,459	
Operation and maintenance.....	28,056	9,607	1,778	116,846	2,866	10,144
Administration.....	11,705	5,998	2,051	148,176	5,284	9,000
Fixed charges—interest and principal	5,652	6	8	78,901	7,035	42
—depreciation.....	8,548	2,965	824	83,110	3,877	8,249
—other.....						
Total expense.....	191,581	70,694	19,591	1,682,865	43,646	148,657
Net income or net expense.....	20,189	13,463	1,690	137,922	4,045	15,598
Number of customers.....	1,854	805	348	21,278	549	1,081



Statements for the Year Ended December 31, 1958

Elmvale 917	Elmwood V. A.	Elora 1,468	Embro 542	Erieau 451	Erie Beach 96	Erin 996	Essex 3,480	Etobicoke Twp. 121,258
\$ 60,184 15,413	\$ 22,354 5,853	\$ 89,480 29,215	\$ 42,719 12,925	\$ 70,412 9,513	\$ 19,500 1,537	\$ 47,809 4,289	\$ 208,309 51,815	\$ 10,951,713 986,033
44,771	16,501	60,265	29,794	60,899	17,963	43,520	156,494	9,965,680
10,012	1,669	12,128	4,190	16,250	1,536	10,964	9,439	39,096
9,858	8,000	.....	6,500	.....	.....	.....	.....	537,000
545	106	489	462	727	211	452	1,305	208,770
20,415	9,775	12,617	11,152	16,977	1,747	11,416	10,744	784,866
4,204	271	4,569	.....	1,282	547	485	16,442	378,366
.....	.....	187	.....	395	.....	258	44	253,816
.....	.....	.....	.....	.....	.....	.....	.....	182,854
4,204	271	4,756	.....	1,677	547	743	16,486	815,036
52,334	17,637	122,507	39,326	32,459	6,047	10,299	133,072	2,305,080
<b>121,724</b>	<b>44,184</b>	<b>200,145</b>	<b>80,272</b>	<b>112,012</b>	<b>26,304</b>	<b>65,978</b>	<b>316,796</b>	<b>13,870,662</b>
.....	.....	5,900	.....	13,779	4,168	5,800	9,900	6,568,929
3,130	30	191	4,160	.....	632	7	221	78,773
180	55	1,149	100	1,029	270	726	2,051	278,754
3,310	85	7,240	4,260	14,808	5,070	6,533	12,172	6,926,456
52,334	17,637	122,507	39,326	32,459	6,047	10,299	133,072	2,305,080
80	.....	.....	.....	21	81	36	128	12,053
52,414	17,637	122,507	39,326	32,480	6,128	10,335	133,200	2,317,133
6,544	6,106	14,100	7,500	8,104	4,132	8,700	27,600	1,153,495
.....	.....	.....	.....	.....	.....	.....	.....	253,816
59,456	20,356	56,298	32,004	56,789	11,049	40,410	143,824	3,219,762
.....	.....	.....	2,818	169	75	.....	.....	.....
66,000	26,462	70,398	36,686	64,724	15,106	49,110	171,424	4,627,073
<b>121,724</b>	<b>44,184</b>	<b>200,145</b>	<b>80,272</b>	<b>112,012</b>	<b>26,304</b>	<b>65,978</b>	<b>316,796</b>	<b>13,870,662</b>
26,237	7,910	47,642	20,485	27,929	5,322	27,306	100,663	5,166,396
325	403	162	197	476	1	156	479	23,905
<b>26,562</b>	<b>8,313</b>	<b>47,804</b>	<b>20,682</b>	<b>28,405</b>	<b>5,323</b>	<b>27,462</b>	<b>101,142</b>	<b>5,190,301</b>
19,241	6,184	30,161	13,282	15,078	2,196	17,950	55,356	3,201,345
2,333	488	7,306	2,566	3,146	219	3,015	12,469	333,059
3,655	1,083	2,811	495	2,248	755	1,968	12,735	274,559
.....	.....	669	17	1,896	632	937	2,032	553,276
1,700	666	2,850	1,278	1,729	429	1,092	6,280	231,623
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>26,929</b>	<b>8,421</b>	<b>43,797</b>	<b>17,638</b>	<b>24,097</b>	<b>4,231</b>	<b>24,962</b>	<b>88,872</b>	<b>4,593,862</b>
<b>367</b>	<b>108</b>	<b>4,007</b>	<b>3,044</b>	<b>4,308</b>	<b>1,092</b>	<b>2,500</b>	<b>12,270</b>	<b>596,439</b>
377	135	532	228	320	134	394	1,183	42,685

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality . . . . .	Exeter	Fergus	Finch	Flesherton	Fonthill	Forest
Population . . . . .	2,758	3,725	413	480	2,100	2,025
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost . . . . .	187,176	255,690	35,232	33,412	134,081	112,778
Accumulated depreciation . . . . .	51,922	38,840	7,194	9,196	18,960	38,409
Net fixed assets . . . . .	135,254	216,850	28,038	24,216	115,121	74,369
<b>CURRENT ASSETS</b>						
Cash on hand and in bank . . . . .	11,431	18,270		5,586	1,366	14,751
Investment in government securities	10,000		14,000	16,000		38,348
Accounts receivable . . . . .	2,684	3,480	396	103	1,442	1,513
Total current assets . . . . .	24,115	21,750	14,396	21,689	2,808	54,612
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation . . . . .	9,985	8,692	175	91	278	12,410
Sinking fund on local debentures . . . . .						
Miscellaneous . . . . .	120	91	400			171
Total other assets . . . . .	10,105	8,783	575	91	278	12,581
Equity in Ontario Hydro Systems . . . . .	174,034	269,469	19,515	24,194	44,610	134,830
	343,508	516,852	62,524	70,190	162,817	276,392
<b>LIABILITIES</b>						
Debentures outstanding . . . . .		27,000			22,550	
Accounts payable . . . . .	266	215	1,445	405	1,492	540
Other . . . . .	2,222	3,299	227	164	9,064	1,240
Total liabilities . . . . .	2,488	30,514	1,672	569	33,106	1,780
<b>RESERVES</b>						
Equity in Ontario Hydro Systems . . . . .	174,034	269,469	19,515	24,194	44,610	134,830
Other . . . . .	180					
Total reserves . . . . .	174,214	269,469	19,515	24,194	44,610	134,830
<b>CAPITAL</b>						
Debentures redeemed . . . . .	20,000	48,000	7,000	5,831	38,950	23,357
Local sinking fund . . . . .						
Accumulated net income invested in plant or held as working funds . . . . .	146,806	168,869	34,337	39,596	46,296	116,425
Frequency standardization expense charged this year . . . . .					145	
Total capital . . . . .	166,806	216,869	41,337	45,427	85,101	139,782
	343,508	516,852	62,524	70,190	162,817	276,392
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy . . . . .	116,392	176,795	10,065	13,266	62,802	72,319
Other . . . . .	1,047	368	555	628	1,189	1,228
Total revenue . . . . .	117,439	177,163	10,620	13,894	63,991	73,547
<b>EXPENSE</b>						
Power purchased . . . . .	73,643	120,975	7,777	10,164	38,102	48,948
Local generation . . . . .						
Operation and maintenance . . . . .	13,478	13,187	1,301	1,067	3,052	8,734
Administration . . . . .	15,628	8,095	1,105	1,067	3,755	7,871
Fixed charges—interest and principal		3,147		1	4,823	
—depreciation . . . . .	5,557	6,457	947	988	3,243	2,175
—other . . . . .						
Total expense . . . . .	108,306	151,861	11,130	13,287	52,975	67,728
Net income or net expense . . . . .	9,133	25,302	510	607	11,016	5,819
Number of customers . . . . .	1,162	1,297	188	236	720	863

## Statements for the Year Ended December 31, 1958

Forest Hill	Frankford	Galt	Georgetown	Glencoe	Goderich	Grand Bend	Grand Valley	Granton
19,992	1,631	25,102	8,200	1,105	6,011	876	667	296
\$ 1,443,901 406,638	\$ 74,153 10,407	\$ 2,329,035 710,603	\$ 679,670 74,368	\$ 101,626 25,440	\$ 562,741 128,291	\$ 113,633 24,463	\$ 43,754 13,503	\$ 13,867 2,943
1,037,263	63,746	1,618,432	605,302	76,186	434,450	89,170	30,251	10,924
249,445	20,607	69,935	71,926	50	84,174	3,164	5,616	4,190
74,000	.....	90,000	4,000	10,700	36,000	.....	5,500	.....
13,150	524	12,129	3,319	487	17,913	2,138	1,022	71
336,595	21,131	172,064	79,245	11,237	138,087	5,302	12,138	4,261
73,772	.....	127,020	63,089	2,527	18,901	11,396	429	.....
83	.....	1,814	535	299	8,540	110	148	42
73,855	.....	128,834	63,624	2,826	27,441	11,506	577	42
897,492	13,962	2,047,716	425,814	67,666	448,121	31,469	45,927	23,469
<b>2,345,205</b>	<b>98,839</b>	<b>3,967,046</b>	<b>1,173,985</b>	<b>157,915</b>	<b>1,048,099</b>	<b>137,447</b>	<b>88,893</b>	<b>38,696</b>
5,276	2,000	171,500	340,002	.....	92,000	73,920	.....	1,332
42,296	.....	1,621	3,902	387	20,228	4,538	1,726	208
37,001	1,264	49,394	28,388	605	10,775	941	.....	40
84,573	3,264	222,515	372,292	992	123,003	79,399	1,726	1,580
897,492	13,962	2,047,716	425,814	67,666	448,121	31,469	45,927	23,469
602	.....	6,869	3,206	301	515	106	.....	55
898,094	13,962	2,054,585	429,020	67,967	448,636	31,575	45,927	23,524
352,933	18,000	646,502	51,890	20,113	129,088	11,080	10,794	5,312
1,009,605	63,613	1,043,444	320,783	68,843	347,799	15,393	30,446	8,280
.....	.....	.....	.....	.....	427	.....	.....	.....
1,362,538	81,613	1,689,946	372,673	88,956	476,460	26,473	41,240	13,592
<b>2,345,205</b>	<b>98,839</b>	<b>3,967,046</b>	<b>1,173,985</b>	<b>157,915</b>	<b>1,048,099</b>	<b>137,447</b>	<b>88,893</b>	<b>38,696</b>
753,671	34,749	1,088,254	356,786	33,692	280,207	54,409	23,365	7,553
10,676	494	6,274	2,538	985	1,309	157	148	5
<b>764,347</b>	<b>35,243</b>	<b>1,094,528</b>	<b>359,324</b>	<b>34,677</b>	<b>281,516</b>	<b>54,566</b>	<b>23,513</b>	<b>7,558</b>
435,033	17,955	706,237	221,232	20,817	183,038	27,994	17,594	4,109
.....	.....	.....	.....	.....	.....	.....	.....	.....
49,310	2,119	107,419	13,591	4,729	19,868	9,109	1,309	803
58,454	3,605	61,231	28,263	4,166	21,853	6,454	1,313	1,005
2,820	2,123	34,224	29,330	.....	9,400	6,821	.....	307
42,171	1,797	71,271	15,444	2,897	16,376	3,147	1,359	379
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>587,788</b>	<b>27,599</b>	<b>980,382</b>	<b>307,860</b>	<b>32,609</b>	<b>250,535</b>	<b>53,525</b>	<b>21,575</b>	<b>6,603</b>
<b>176,559</b>	<b>7,644</b>	<b>114,146</b>	<b>51,464</b>	<b>2,068</b>	<b>30,981</b>	<b>1,041</b>	<b>1,938</b>	<b>955</b>
6,913	554	8,336	3,005	474	2,239	812	323	118



Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Gravenhurst	Grimsby	Guelph	Hagersville	Hamilton	Hanover
Population.....	3,075	4,501	35,787	2,106	248,946	4,162
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	206,448	241,605	2,715,308	117,413	19,525,656	284,624
Accumulated depreciation.....	46,636	35,975	432,137	31,272	1,641,988	88,573
Net fixed assets.....	159,812	205,630	2,283,171	86,141	17,883,668	196,051
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	8,192	150	363	782	1,251,353	40
Investment in government securities	42,000	17,000	.....	18,000	.....	67,000
Accounts receivable.....	2,697	860	12,375	82	1,041,039	4,029
Total current assets.....	52,889	18,010	12,738	18,864	2,292,392	71,069
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	12,597	3,840	152,053	5,036	895,945	29,114
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	.....	200	4,699	13,467	11,524	.....
Total other assets.....	12,597	4,040	156,752	18,503	907,469	29,114
Equity in Ontario Hydro Systems....	165,920	89,698	2,399,719	247,102	23,321,781	303,538
	391,218	317,378	4,852,380	370,610	44,405,310	599,772
<b>LIABILITIES</b>						
Debentures outstanding.....	.....	.....	694,000	.....	1,239,000	.....
Accounts payable.....	12,465	25,870	171,575	17	1,027,786	592
Other.....	2,259	15,642	56,296	1,330	103,404	2,494
Total liabilities.....	14,724	41,512	921,871	1,347	2,370,190	3,086
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	165,920	89,698	2,399,719	247,102	23,321,781	303,538
Other.....	390	.....	14,550	.....	265,579	.....
Total reserves.....	166,310	89,698	2,414,269	247,102	23,587,360	303,538
<b>CAPITAL</b>						
Debentures redeemed.....	44,279	85,344	301,000	8,000	6,446,275	80,162
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds..	165,905	100,824	1,325,522	114,161	12,005,985	212,986
Frequency standardization expense charged this year.....	.....	.....	110,282	.....	4,500	.....
Total capital.....	210,184	186,168	1,516,240	122,161	18,447,760	293,148
	391,218	317,378	4,852,380	370,610	44,405,310	599,772
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	113,232	139,918	1,385,782	94,038	13,082,986	146,837
Other.....	2,598	551	7,276	544	96,177	4,833
Total revenue.....	115,830	140,469	1,393,058	94,582	13,179,163	151,670
<b>EXPENSE</b>						
Power purchased.....	89,320	97,357	958,850	69,722	9,614,151	113,490
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	10,694	5,020	124,603	10,939	913,641	13,482
Administration.....	8,434	12,996	102,095	4,976	698,130	14,782
Fixed charges—interest and principal	.....	687	65,693	3	114,038	.....
—depreciation.....	5,515	5,801	69,608	3,324	440,680	5,362
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	113,963	121,861	1,320,849	88,964	11,780,640	147,116
Net income or net expense.....	1,867	18,608	72,209	5,618	1,398,523	4,554
Number of customers.....	1,290	1,587	11,201	744	74,604	1,509

Statements for the Year Ended December 31, 1958

Harriston	Harrow	Hastings	Havelock	Hawkesbury	Hensall	Hespeler	Highgate	Holstein
1,637	1,828	902	1,288	8,359	783	4,109	400	170
\$ 129,161 24,029	\$ 164,507 30,868	\$ 63,901 20,403	\$ 77,913 19,488	\$ 469,861 67,995	\$ 100,945 24,829	\$ 313,067 28,533	\$ 29,344 9,853	\$ 11,549 2,496
105,132	133,639	43,498	58,425	401,866	76,116	284,534	19,491	9,053
14,368	3,334	12,643	4,578	10,732	2,142	62,166	1,150	2,131
.....	11,000	7,000	37,000	.....	4,000	20,000	3,000	1,000
1,657	390	163	2,445	1,997	2,027	29,142	355	5
16,025	14,724	19,806	44,023	12,729	8,169	111,308	4,505	3,136
4,388	7,738	1,189	246	27,973	584	14,964	.....	210
.....	.....	.....	990	1,133	74	699	718	.....
110	554	.....	.....	.....	.....	.....	.....	.....
4,498	8,292	1,189	1,236	29,106	658	15,663	718	210
126,617	114,601	22,885	44,651	25,772	64,011	481,860	30,381	9,470
252,272	271,256	87,378	148,335	469,473	148,954	893,365	55,095	21,869
3,300	.....	.....	19,500	225,000	.....	.....	.....	.....
31	944	.....	.....	678	15	1,039	2,594	.....
1,684	1,285	770	392	4,510	230	2,680	140	43
5,015	2,229	770	19,892	230,188	245	3,719	2,734	43
126,617	114,601	22,885	44,651	25,772	64,011	481,860	30,381	9,470
.....	59	.....	.....	.....	67	.....	.....	.....
126,617	114,660	22,885	44,651	25,772	64,078	481,860	30,381	9,470
27,518	12,000	21,000	43,400	60,000	12,000	77,571	5,000	2,762
.....	.....	.....	.....	.....	.....	.....	.....	.....
93,122	142,367	42,723	40,392	153,513	72,631	330,215	17,837	9,594
.....	.....	.....	.....	.....	.....	.....	857	.....
120,640	154,367	63,723	83,792	213,513	84,631	407,786	21,980	12,356
252,272	271,256	87,378	148,335	469,473	148,954	893,365	55,095	21,869
66,018	80,422	26,797	33,816	177,819	41,848	221,951	11,501	5,055
1,108	405	376	1,370	574	351	4,355	162	31
67,126	80,827	27,173	35,186	178,393	42,199	226,306	11,663	5,086
45,864	48,223	13,191	15,546	71,425	28,956	165,363	8,004	3,653
.....	.....	.....	.....	.....	.....	.....	.....	.....
6,408	7,598	1,561	2,628	20,163	998	15,392	990	232
5,032	6,765	3,978	3,871	29,636	2,074	7,470	783	650
674	.....	.....	2,239	20,575	.....	.....	101	.....
3,464	4,352	2,010	2,231	11,488	2,757	7,088	937	318
.....	.....	.....	.....	.....	.....	.....	.....	.....
61,442	66,938	20,740	26,515	153,287	34,785	195,313	10,815	4,853
5,684	13,889	6,433	8,671	25,106	7,414	30,993	848	233
641	684	430	418	2,083	338	1,323	163	92

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Huntsville	Ingersoll	Iroquois	Jarvis	Kemptville	Kincardine
Population.....	3,286	6,957	988	736	1,829	2,669
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	185,619	530,341	174,346	53,018	105,022	193,916
Accumulated depreciation.....	35,212	107,837	3,896	13,312	21,120	48,926
Net fixed assets.....	150,407	422,504	170,450	39,706	83,902	144,990
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	13,917	100	6,048	5,419	12,510	14,231
Investment in government securities	10,000		16,000		12,000	32,000
Accounts receivable.....	4,146	4,782	203	284	2,934	1,441
Total current assets.....	28,063	4,882	22,251	5,703	27,444	47,672
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equipment at cost less depreciation..	11,602	29,745	6,682	113	11,613	6,123
Sinking fund on local debentures..						
Miscellaneous.....		523		4,093		82
Total other assets.....	11,602	30,268	6,682	4,206	11,613	6,205
Equity in Ontario Hydro Systems....	245,900	636,390	29,718	49,671	93,868	177,439
	<b>435,972</b>	<b>1,094,044</b>	<b>229,101</b>	<b>99,286</b>	<b>216,827</b>	<b>376,306</b>
<b>LIABILITIES</b>						
Debentures outstanding.....		59,168				
Accounts payable.....	57	6,317	173	1,201	64	186
Other.....	1,946	21,857	1,341		721	916
Total liabilities.....	2,003	87,342	1,514	1,201	785	1,102
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	245,900	636,390	29,718	49,671	93,868	177,439
Other.....	3	96			551	40
Total reserves.....	245,903	636,486	29,718	49,671	94,419	177,479
<b>CAPITAL</b>						
Debentures redeemed.....	15,697	100,632		10,500	19,507	60,000
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds..	172,369	293,498	197,869	37,914	102,116	137,725
Frequency standardization expense charged this year.....		23,914				
Total capital.....	188,066	370,216	197,869	48,414	121,623	197,725
	<b>435,972</b>	<b>1,094,044</b>	<b>229,101</b>	<b>99,286</b>	<b>216,827</b>	<b>376,306</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	142,076	287,840	44,521	17,975	76,670	103,999
Other.....	545	2,365	636	8	693	1,419
Total revenue.....	<b>142,621</b>	<b>290,205</b>	<b>45,157</b>	<b>17,983</b>	<b>77,363</b>	<b>105,418</b>
<b>EXPENSE</b>						
Power purchased.....	94,319	178,695	27,764	12,885	48,430	79,414
Local generation.....						
Operation and maintenance.....	13,890	26,374	5,082	515	9,792	12,486
Administration.....	9,493	31,614	5,612	1,660	5,249	6,028
Fixed charges—interest and principal	180	7,564				
—depreciation.....	4,623	16,672	2,510	1,603	2,852	5,700
—other.....						
Total expense.....	<b>122,505</b>	<b>260,919</b>	<b>40,968</b>	<b>16,663</b>	<b>66,323</b>	<b>103,628</b>
Net income or net expense.....	<b>20,116</b>	<b>29,286</b>	<b>4,189</b>	<b>1,320</b>	<b>11,040</b>	<b>1,790</b>
Number of customers.....	1,195	2,307	364	264	730	1,158



Statements for the Year Ended December 31, 1958

Kingston	Kingsville	Kirkfield	Kitchener	Lakefield	Lambeth	Lanark	Lancaster	La Salle
47,882	3,010	132	66,547	2,006	1,678	925	628	2,942*
\$	\$	\$	\$	\$	\$	\$	\$	\$
4,268,456	204,184	18,079	7,792,227	121,594	78,521	37,489	25,341	206,855
1,036,375	49,777	3,377	1,340,881	36,642	17,191	5,992	7,898	34,237
5,304,831	253,961	21,456	9,133,108	158,236	95,712	43,481	33,239	241,092
294,681	14,100	785	45,773	17,869	15,443	6,407	5,743	6,444
180,000	34,500	1,200	65,000	65,000	20,000	8,500	8,500	8,500
645,209	1,075	626	292,200	629	3,160	245	3,000	4,444
1,119,890	53,675	2,561	337,972	82,687	34,648	20,000	12,243	10,940
245,269	10,759	49	353,064	7,906	591	605	11	6,190
217,085	215	667	12,025		10,905			1
466,254	10,974	736	370,117	7,996	10,996	605	33	6,192
1,434,334	159,120	10,588	4,953,059	75,121	45,772	25,370	20,453	71,742
6,252,559	378,174	28,587	12,112,494	251,356	136,746	84,170	50,282	261,464
1,464,000			806,800		15,281			
138,695	5,909	11	239,748	224	12,104			29,404
106,829	3,660	6	103,794	835	995	226	463	2,129
1,709,514	9,509	17	1,150,342	1,089	24,380	226	463	31,533
1,434,334	159,120	10,588	4,953,059	75,121	45,772	25,370	20,453	71,742
114,631	389	200	177,050	1,365	54			
1,548,965	159,509	10,788	5,130,109	76,486	45,826	25,370	20,453	71,742
340,839	33,500	5,766	1,530,350	33,500	17,219	7,316	8,917	15,500
2,653,231	175,896	12,806	4,301,898	140,310	45,321	51,258	20,445	142,689
2,894,676	209,096	17,782	5,832,045	173,811	61,540	58,574	29,360	158,189
6,252,559	378,174	28,587	12,112,494	251,356	136,746	84,170	50,282	261,464
1,806,405	94,867	6,125	3,302,838	56,221	45,111	15,905	12,515	75,526
26,484	2,554	73	46,305	2,316	5	863	444	253
1,832,889	97,421	6,198	3,349,143	58,537	45,116	16,668	12,959	75,779
1,084,973	60,086	3,424	1,829,020	32,819	28,126	9,604	5,921	44,135
167,906	10,238	733	378,803	4,759	2,307	1,584	1,971	8,312
220,009	14,476	499	197,693	8,505	3,084	1,577	1,891	12,149
100,137	8	82	196,537		2,690			
115,959	5,642	490	157,325	3,647	2,137	950	466	3,912
1,688,984	90,450	5,228	2,759,378	49,530	38,444	13,730	12,249	68,508
143,905	6,971	970	589,765	9,007	6,672	2,938	710	7,271
15,013	1,229	97	20,955	691	566	313	205	838

\*Population from assessment rolls

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Leamington	Lindsay	Listowel	London	London Twp. V. A.	Long Branch 11,010
Population.....	8,648	10,321	3,530	99,115		
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	485,216	775,046	333,233	8,655,589	131,837	546,004
Accumulated depreciation.....	123,209	184,742	104,971	2,230,151	27,583	44,036
Net fixed assets.....	362,007	590,304	228,262	6,425,438	104,254	501,968
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	20,575	28,462	25,624	357,930	17,420	7,926
Investment in government securities	2,000		20,000	306,500		3,000
Accounts receivable.....	2,787	6,898	643	430,202	2,546	11,707
Total current assets.....	25,362	35,360	46,267	1,094,632	19,966	22,633
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation....	52,180	95,622	13,842	554,357	555	
Sinking fund on local debentures.....						
Miscellaneous.....	2,551		373	8,770	335	
Total other assets.....	54,731	95,622	14,215	563,127	890	
Equity in Ontario Hydro Systems.....	403,418	516,301	298,605	8,030,971	104,037	255,347
	845,518	1,237,587	587,349	16,114,168	229,147	779,948
<b>LIABILITIES</b>						
Debentures outstanding.....	30,000		51,575	472,000	24,063	
Accounts payable.....	894	137	353	432,194		61,500
Other.....	9,338	7,582	4,710	90,327	2,406	9,926
Total liabilities.....	40,232	7,719	56,638	994,521	26,469	71,426
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	403,418	516,301	298,605	8,030,971	104,037	255,347
Other.....	539			273,177	32	1,147
Total reserves.....	403,957	516,301	298,605	8,304,148	104,069	256,494
<b>CAPITAL</b>						
Debentures redeemed.....	56,000	130,000	61,615	1,759,900	27,743	40,305
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds..	345,329	583,567	170,491	5,083,418	70,866	411,723
Frequency standardization expense charged this year.....				27,819		
Total capital.....	401,329	713,567	232,106	6,815,499	98,609	452,028
	845,518	1,237,587	587,349	16,114,168	229,147	779,948
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	293,005	399,428	148,739	3,739,463	77,282	344,925
Other.....	1,609	2,801	1,246	84,837	430	367
Total revenue.....	294,614	402,229	149,985	3,824,300	77,712	345,292
<b>EXPENSE</b>						
Power purchased.....	203,849	237,849	105,714	2,208,739	53,569	231,376
Local generation.....						
Operation and maintenance.....	25,545	57,226	11,531	432,348	4,595	30,017
Administration.....	29,628	36,668	10,405	305,473	5,962	26,030
Fixed charges—interest and principal	3,440		6,518	45,270	3,017	4,158
—depreciation.....	13,665	21,823	6,233	149,092	3,608	11,756
—other.....						
Total expense.....	276,127	353,566	140,401	3,140,922	70,751	303,337
Net income or net expense.....	18,487	48,663	9,584	683,378	6,961	41,955
Number of customers.....	3,121	3,656	1,424	31,455	957	3,984

## Statements for the Year Ended December 31, 1958

L'Orignal 1,078	Lucan 921	Lucknow 962	Lynden 532	Madoc 1,502	Magneta- wan 251	Markdale 984	Markham 3,991	Marmora 1,395
\$ 68,464 19,014	\$ 67,302 19,112	\$ 83,008 10,182	\$ 29,875 8,113	\$ 117,032 26,052	\$ 20,374 5,256	\$ 58,558 9,313	\$ 242,099 37,461	\$ 76,301 26,833
49,450	48,190	72,826	21,762	90,980	15,118	49,245	204,638	49,468
16,466	3,521	2,866	4,138	30,157	7,108	11,519	.....	4,943
.....	5,500	9,000	2,000	7,000	4,000	.....	.....	3,000
121	27	378	332	2,265	.....	173	11,179	428
16,587	9,048	12,244	6,470	39,422	11,108	11,692	11,179	8,371
.....	452	436	221	5,176	530	134	1,106	2,180
.....	14	900	.....	.....	2,536	.....	439	.....
.....	466	1,336	221	5,176	3,066	134	1,545	2,180
4,434	63,267	77,177	39,060	48,940	1,976	43,504	95,039	33,414
<b>70,471</b>	<b>120,971</b>	<b>163,583</b>	<b>67,513</b>	<b>184,518</b>	<b>31,268</b>	<b>104,575</b>	<b>312,401</b>	<b>93,433</b>
22,000	.....	.....	.....	.....	18,000	.....	24,182	.....
1,578	.....	94	248	.....	.....	2,819	3,884	.....
180	731	.....	13	1,021	.....	442	21,703	985
23,758	731	94	261	1,021	18,000	3,261	49,769	985
4,434	63,267	77,177	39,060	48,940	1,976	43,504	95,039	33,414
.....	.....	280	.....	.....	.....	.....	226	.....
4,434	63,267	77,457	39,060	48,940	1,976	43,504	95,265	33,414
6,000	11,214	17,614	4,495	14,000	6,000	6,370	15,119	15,092
.....	.....	.....	.....	.....	.....	.....	.....	.....
36,279	45,759	68,418	23,697	120,557	5,292	51,440	152,248	43,942
.....	.....	.....	.....	.....	.....	.....	.....	.....
42,279	56,973	86,032	28,192	134,557	11,292	57,810	167,367	59,034
<b>70,471</b>	<b>120,971</b>	<b>163,583</b>	<b>67,513</b>	<b>184,518</b>	<b>31,268</b>	<b>104,575</b>	<b>312,401</b>	<b>93,433</b>
22,088	34,039	33,388	15,180	52,779	7,632	30,380	130,638	42,349
265	311	260	242	696	181	1	976	311
<b>22,353</b>	<b>34,350</b>	<b>33,648</b>	<b>15,422</b>	<b>53,475</b>	<b>7,813</b>	<b>30,381</b>	<b>131,614</b>	<b>42,660</b>
9,999	22,020	26,110	9,846	26,816	3,209	21,480	84,811	25,319
.....	.....	.....	.....	.....	.....	.....	.....	.....
2,343	2,048	2,623	541	1,943	493	2,754	5,687	5,241
2,373	2,049	3,631	1,430	4,609	585	1,740	9,176	3,444
2,151	.....	19	2	5	1,970	.....	3,474	.....
2,015	1,996	1,990	909	3,213	596	1,490	5,874	1,496
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>18,881</b>	<b>28,113</b>	<b>34,373</b>	<b>12,728</b>	<b>36,586</b>	<b>6,853</b>	<b>27,464</b>	<b>109,022</b>	<b>35,500</b>
<b>3,472</b>	<b>6,237</b>	<b>725</b>	<b>2,694</b>	<b>16,889</b>	<b>960</b>	<b>2,917</b>	<b>22,592</b>	<b>7,160</b>
329	349	452	172	581	100	409	1,250	517



Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Martintown	Maxville	Meaford	Merlin	Merrick- ville	Merriton
Population.....	415	831	3,640	524	882	5,842
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	24,060	57,584	241,483	60,550	64,514	497,805
Accumulated depreciation.....	4,639	8,152	49,696	18,926	5,275	68,328
Net fixed assets.....	19,421	49,432	191,787	41,624	59,239	429,477
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	3,265	6,135	23,311	5,808	6,235	36,113
Investment in government securities .....		1,500				87,000
Accounts receivable.....	3,293	1,114	1,224	247	4,982	2,710
Total current assets.....	6,558	8,749	24,535	6,055	11,217	125,823
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	37	335	14,086	672	394	50,932
Sinking fund on local debentures.....						
Miscellaneous.....			58		353	26
Total other assets.....	37	335	14,144	672	747	50,958
Equity in Ontario Hydro Systems....	9,184	35,322	156,664	36,042	10,473	1,035,842
	35,200	93,838	387,130	84,393	81,676	1,642,100
<b>LIABILITIES</b>						
Debentures outstanding.....					17,000	
Accounts payable.....	109	1,045	3,972	211	1,423	872
Other.....	81	126	4,893	130	790	2,463
Total liabilities.....	190	1,171	8,865	341	19,213	3,335
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	9,184	35,322	156,664	36,042	10,473	1,035,842
Other.....	81	296	100	13		
Total reserves.....	9,265	35,618	156,764	36,055	10,473	1,035,842
<b>CAPITAL</b>						
Debentures redeemed.....	5,347	13,642	47,724	13,122	8,000	32,186
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.	20,398	43,407	173,777	37,275	43,990	570,737
Frequency standardization expense charged this year.....				2,400		
Total capital.....	25,745	57,049	221,501	47,997	51,990	602,923
	35,200	93,838	387,130	84,393	81,676	1,642,100
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	9,275	24,787	129,665	17,466	25,010	679,158
Other.....	18	212	1,499	2,766	90	2,855
Total revenue.....	9,293	24,999	131,164	20,232	25,100	682,013
<b>EXPENSE</b>						
Power purchased.....	4,685	15,086	96,759	10,470	13,821	574,750
Local generation.....						
Operation and maintenance.....	699	1,628	10,701	1,454	1,246	22,048
Administration.....	627	1,110	10,911	4,152	2,402	27,187
Fixed charges—interest and principal .....					1,737	
—depreciation.....	620	1,418	6,417	1,807	1,525	12,165
—other.....						
Total expense.....	6,631	19,242	124,788	17,883	20,731	636,150
Net income or net expense.....	2,662	5,757	6,376	2,349	4,369	45,863
Number of customers.....	121	306	1,481	247	350	1,798

## Statements for the Year Ended December 31, 1958

Midland	Mildmay	Millbrook	Milton	Milverton	Mimico	Mitchell	Moorefield	Morrisburg
8,348	844	805	4,915	1,082	14,338	2,174	309	2,003
\$ 574,881 224,071	\$ 42,188 5,048	\$ 49,384 8,547	\$ 421,963 69,118	\$ 74,180 14,479	\$ 821,528 181,216	\$ 200,866 51,305	\$ 20,745 5,177	\$ 110,221 12,957
350,810	37,140	40,837	352,845	59,701	640,312	149,561	15,568	97,264
23,788	476	8,162	41,020	20,915	73,235	11,441	1,136	42,034
190,000	13,000	11,000	.....	.....	115,000	23,056	965	11,000
54,689	26	333	3,014	188	6,303	2,406	32	1,104
268,477	13,502	19,495	44,034	21,103	194,538	36,903	2,133	54,138
15,525	342	1,311	13,479	867	20,582	26,473	132	9,066
.....	.....	.....	.....	.....	.....	.....	.....	.....
2,446	86	1,350	737	240	1,737	485	.....	.....
17,971	428	2,661	14,216	1,107	22,319	26,958	132	9,066
748,367	24,408	16,684	354,639	131,945	550,271	163,209	21,442	46,515
<b>1,385,625</b>	<b>75,478</b>	<b>79,677</b>	<b>765,734</b>	<b>213,856</b>	<b>1,407,440</b>	<b>376,631</b>	<b>39,275</b>	<b>206,983</b>
.....	.....	.....	79,433	13,000	92,500	18,400	.....	.....
515	.....	.....	2,371	.....	4,389	67	11	1,570
2,627	236	726	6,753	147	37,051	1,280	2	2,745
3,142	236	726	88,557	13,147	133,940	19,747	13	4,315
748,367	24,408	16,684	354,639	131,945	550,271	163,209	21,442	46,515
406	.....	.....	454	.....	500	1,189	.....	15,000
748,773	24,408	16,684	355,093	131,945	550,771	164,398	21,442	61,515
111,945	12,303	9,000	44,781	11,500	158,677	28,895	4,500	31,636
.....	.....	.....	.....	.....	.....	.....	.....	.....
521,765	38,531	53,267	277,303	57,264	564,052	163,591	13,320	109,517
.....	.....	.....	.....	.....	.....	.....	.....	.....
633,710	50,834	62,267	322,084	68,764	722,729	192,486	17,820	141,153
<b>1,385,625</b>	<b>75,478</b>	<b>79,677</b>	<b>765,734</b>	<b>213,856</b>	<b>1,407,440</b>	<b>376,631</b>	<b>39,275</b>	<b>206,983</b>
302,949	22,548	25,055	249,168	50,559	406,867	100,451	9,107	77,520
10,267	461	520	875	342	12,234	1,575	34	2,905
<b>313,216</b>	<b>23,009</b>	<b>25,575</b>	<b>250,043</b>	<b>50,901</b>	<b>419,101</b>	<b>102,026</b>	<b>9,141</b>	<b>80,425</b>
222,987	16,082	13,995	156,023	33,721	263,023	57,995	6,914	45,342
.....	.....	.....	.....	.....	.....	.....	.....	.....
25,403	3,129	1,127	8,689	2,597	40,525	9,248	378	8,474
18,704	1,902	2,875	21,676	4,006	47,160	11,548	494	10,411
.....	.....	.....	.....	.....	.....	.....	.....	.....
12,165	969	2	7,262	1,118	9,299	1,881	.....	.....
.....	.....	1,245	10,524	1,982	22,039	5,670	589	2,578
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>279,259</b>	<b>22,082</b>	<b>19,244</b>	<b>204,174</b>	<b>43,424</b>	<b>382,046</b>	<b>86,342</b>	<b>8,375</b>	<b>66,805</b>
33,957	927	6,331	45,869	7,477	37,055	15,684	766	13,620
2,776	306	317	1,633	457	5,638	873	127	750

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Mount Brydges 901	Mount Forest 2,414	Napanee	Neustadt	Newboro	Newburgh
Population.....			4,473	495	296	565
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	47,876	139,106	259,033	35,251	27,424	44,243
Accumulated depreciation.....	8,663	32,080	60,446	12,456	4,187	15,652
Net fixed assets.....	39,213	107,026	198,587	22,795	23,237	28,591
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	1,514	24,992	38,507	2,353	1,145	2,907
Investment in government securities.....		20,000	27,000	21,200	5,000	3,000
Accounts receivable.....	883	1,864	20,083	138	350	240
Total current assets.....	2,397	46,856	85,590	23,691	6,495	6,147
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	104	4,309	25,326	24		238
Sinking fund on local debentures..						
Miscellaneous.....	90		165		1,326	45
Total other assets.....	194	4,309	25,491	24	1,326	283
Equity in Ontario Hydro Systems....	27,878	134,054	218,899	22,014	2,393	5,714
	69,682	292,245	528,567	68,524	33,451	40,735
<b>LIABILITIES</b>						
Debentures outstanding.....					10,573	5,050
Accounts payable.....	3,840		357	62	1,227	
Other.....	149	490	4,629	214	134	226
Total liabilities.....	3,989	490	4,986	276	11,934	5,276
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	27,878	134,054	218,899	22,014	2,393	5,714
Other.....	94					
Total reserves.....	27,972	134,054	218,899	22,014	2,393	5,714
<b>CAPITAL</b>						
Debentures redeemed.....	4,220	21,627	70,000	15,504	6,427	8,950
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds..	33,501	136,074	234,682	30,730	12,697	20,795
Frequency standardization expense charged this year.....						
Total capital.....	37,721	157,701	304,682	46,234	19,124	29,745
	69,682	292,245	528,567	68,524	33,451	40,735
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	19,011	82,425	175,081	9,648	7,306	16,161
Other.....	31	1,111	8,922	842	199	100
Total revenue.....	19,042	83,536	184,003	10,490	7,505	16,261
<b>EXPENSE</b>						
Power purchased.....	12,352	57,891	117,534	8,305	2,749	8,189
Local generation.....						
Operation and maintenance.....	2,065	6,558	17,241	649	559	1,695
Administration.....	2,340	5,158	25,914	1,873	918	1,590
Fixed charges—interest and principal	93				1,144	1,344
—depreciation.....	1,233	3,740	7,191	706	688	869
—other.....						
Total expense.....	18,083	73,347	167,880	11,533	6,058	13,687
Net income or net expense.....	959	10,189	16,123	1,043	1,447	2,574
Number of customers.....	336	948	1,655	201	138	183



Statements for the Year Ended December 31, 1958

Newbury 342	Newcastle 1,134	New Hamburg 2,030	Newmarket 7,629	New Toronto 10,646	Niagara 2,713	Niagara Falls 23,858	North York Twp. 197,546	Norwich 1,638
\$ 18,421 9,195	\$ 86,952 39,919	\$ 125,486 25,954	\$ 481,118 101,836	\$ 838,520 139,077	\$ 227,424 36,157	\$ 1,899,330 491,348	\$ 15,205,380 1,724,825	\$ 79,246 23,564
9,226	47,033	99,532	379,282	699,443	191,267	1,407,982	13,480,555	55,682
5,291	7,400	10,424	39,917	74,873	7,182	150,488	604,939	25
6,500	10,500	10,000	.....	30,000	10,000	55,000	10,000	7,500
778	3,529	1,167	8,941	15,507	2,269	27,193	111,526	2,183
12,569	21,429	21,591	48,858	120,380	19,451	232,681	726,465	9,708
20	3,444	11,551	5,071	27,061	20,658	113,427	722,551	4,607
.....	.....	.....	.....	.....	.....	.....	220,886	.....
1,620	.....	538	293	555	.....	1,403	171,616	5,220
1,640	3,444	12,089	5,364	27,616	20,658	114,830	1,115,053	9,827
14,692	32,200	162,070	156,170	1,798,565	135,081	1,994,307	2,895,539	119,806
<b>38,127</b>	<b>104,106</b>	<b>295,282</b>	<b>589,674</b>	<b>2,646,004</b>	<b>366,457</b>	<b>3,749,800</b>	<b>18,217,612</b>	<b>195,023</b>
.....	.....	12,000	67,651	.....	26,653	.....	6,717,304	.....
749	12	.....	635	139	14	177	134,400	597
114	.....	298	6,355	15,981	2,358	44,102	488,018	1,283
863	12	12,298	74,641	16,120	29,025	44,279	7,339,722	1,880
14,692	32,200	162,070	156,170	1,798,565	135,081	1,994,307	2,895,539	119,806
.....	.....	34	3,031	121	405	565	21,936	77
14,692	32,200	162,104	159,201	1,798,686	135,486	1,994,872	2,917,475	119,883
9,754	14,000	20,729	27,273	8,000	53,855	690,243	1,967,553	13,756
.....	.....	.....	.....	.....	.....	.....	220,886	.....
12,818	57,894	100,151	328,559	823,198	148,091	1,020,406	5,771,976	67,335
.....	.....	.....	.....	.....	.....	.....	.....	7,831
22,572	71,894	120,880	355,832	831,198	201,946	1,710,649	7,960,415	73,260
<b>38,127</b>	<b>104,106</b>	<b>295,282</b>	<b>589,674</b>	<b>2,646,004</b>	<b>366,457</b>	<b>3,749,800</b>	<b>18,217,612</b>	<b>195,023</b>
6,656	41,656	76,286	302,251	1,033,484	101,776	967,139	7,775,714	58,632
255	536	466	719	7,830	774	3,120	30,654	372
<b>6,911</b>	<b>42,192</b>	<b>76,752</b>	<b>302,970</b>	<b>1,041,314</b>	<b>102,550</b>	<b>970,259</b>	<b>7,806,368</b>	<b>59,004</b>
4,476	24,785	45,319	195,258	870,799	67,401	588,117	4,398,431	38,242
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,030	4,659	7,886	21,270	36,005	11,869	128,533	420,010	8,804
512	4,785	5,339	16,323	42,842	7,443	70,534	602,087	6,030
.....	.....	1,520	6,429	.....	2,581	.....	620,902	36
445	2,005	3,402	13,010	21,278	5,675	53,818	335,738	2,414
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>6,463</b>	<b>36,234</b>	<b>63,466</b>	<b>252,290</b>	<b>970,924</b>	<b>94,969</b>	<b>841,002</b>	<b>6,377,168</b>	<b>55,526</b>
<b>448</b>	<b>5,958</b>	<b>13,286</b>	<b>50,680</b>	<b>70,390</b>	<b>7,581</b>	<b>129,257</b>	<b>1,429,200</b>	<b>3,478</b>
132	450	687	2,513	3,768	1,057	7,506	66,807	669

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Norwood	Oakville	Oil Springs	Omeme	Orangeville	Orillia
Population.....	1,048	10,156	482	838	4,522	14,088
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	94,950	1,086,813	54,407	57,345	251,706	4,165,335
Accumulated depreciation.....	23,250	192,524	19,801	20,359	54,416	791,937
Net fixed assets.....	71,700	894,289	34,606	36,986	197,290	3,373,398
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	13,823	34,786	6,948	4,942	70	315
Investment in government securities	5,000		11,000	11,000	100	97,780
Accounts receivable.....	2,704	71,910	65	15	2,155	48,531
Total current assets.....	21,527	106,696	18,013	15,957	2,325	146,626
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	350	71,377	763	2,200	9,202	121,953
Sinking fund on local debentures.....						
Miscellaneous.....	6,006	6,924	209		35	1,300
Total other assets.....	6,356	78,301	972	2,200	9,237	123,253
Equity in Ontario Hydro Systems.....	32,755	195,628	66,855	18,880	191,047	59,477
	132,338	1,274,914	120,446	74,023	399,899	3,702,754
<b>LIABILITIES</b>						
Debentures outstanding.....		355,000				955,000
Accounts payable.....	473	5,388		74	20,936	10,718
Other.....	874	38,283	35	206	2,728	14,124
Total liabilities.....	1,347	398,671	35	280	23,664	979,842
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	32,755	195,628	66,855	18,880	191,047	59,477
Other.....		850		45	50	97,780
Total reserves.....	32,755	196,478	66,855	18,925	191,097	157,257
<b>CAPITAL</b>						
Debentures redeemed.....	55,100	71,000	16,721	12,000	25,594	1,507,000
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.	43,136	608,765	36,835	42,818	159,544	1,058,655
Frequency standardization expense charged this year.....						
Total capital.....	98,236	679,765	53,556	54,818	185,138	2,565,655
	132,338	1,274,914	120,446	74,023	399,899	3,702,754
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	34,117	519,429	15,718	22,428	141,963	666,324
Other.....	468	5,902	1,600	512	654	8,245
Total revenue.....	34,585	525,331	17,318	22,940	142,617	674,569
<b>EXPENSE</b>						
Power purchased.....	18,684	306,706	9,597	13,494	103,665	148,892
Local generation.....						134,568
Operation and maintenance.....	2,000	26,107	1,387	4,579	12,209	81,689
Administration.....	2,444	49,426	2,950	2,296	10,806	76,285
Fixed charges—interest and principal	1,240	34,955				97,665
—depreciation	2,705	27,590	1,067	1,138	6,810	76,913
—other.....						
Total expense.....	27,073	444,784	15,001	21,507	133,490	616,012
Net income or net expense.....	7,512	80,547	2,317	1,433	9,127	58,557
Number of customers.....	412	3,486	224	297	1,616	5,083

## Statements for the Year Ended December 31, 1958

Orono	Oshawa	Ottawa	Otterville	Owen Sound	Paisley	Palmerston	Paris	Parkhill
806	54,896	233,946	704	17,506	770	1,555	5,655	1,007
\$ 54,487 10,604	\$ 5,332,373 929,755	\$ 25,099,484 5,533,365	\$ 48,687 16,143	\$ 1,113,031 186,426	\$ 62,275 13,867	\$ 118,774 38,760	\$ 450,338 113,120	\$ 103,058 15,435
43,883	4,402,618	19,566,119	32,544	926,605	48,408	80,014	337,218	87,623
980	9,113	167,437	926	87,673	5,331	2,167	15,753	6,325
10,000	400,000	543,000	.....	70,000	8,000	21,153	.....	6,000
353	221,429	845,791	127	55,758	707	2,608	3,524	1,451
11,333	630,542	1,556,228	1,053	213,431	14,038	25,928	19,277	13,776
4,901	225,530	609,256	293	98,524	188	16,245	10,844	2,600
40	5,278	102,176	9	397	.....	.....	1,674	134
4,941	230,808	711,432	302	98,921	188	16,245	12,518	2,734
15,273	2,929,879	4,088,794	32,502	953,822	41,306	144,860	381,026	72,297
<b>75,430</b>	<b>8,193,847</b>	<b>25,922,573</b>	<b>66,401</b>	<b>2,192,779</b>	<b>103,940</b>	<b>267,047</b>	<b>750,039</b>	<b>176,430</b>
.....	111,000	6,206,000	.....	52,000	.....	.....	96,600	9,900
75	201,588	563,943	1,570	40,490	79	4,228	345	240
300	96,865	1,025	159	19,523	318	631	2,161	392
375	409,453	6,770,968	1,729	112,013	397	4,859	99,106	10,532
15,273	2,929,879	4,088,794	32,502	953,822	41,306	144,860	381,026	72,297
.....	7,842	449,131	.....	1,482	.....	37	250	.....
15,273	2,937,721	4,537,925	32,502	955,304	41,306	144,897	381,276	72,297
8,000	391,622	3,774,000	4,500	155,718	13,623	27,000	100,400	19,813
.....	.....	.....	.....	.....	.....	.....	.....	.....
51,782	4,455,051	10,839,680	31,082	969,744	48,614	90,291	196,726	73,788
.....	.....	.....	3,412	.....	.....	.....	27,469	.....
59,782	4,846,673	14,613,680	32,170	1,125,462	62,237	117,291	269,657	93,601
<b>75,430</b>	<b>8,193,847</b>	<b>25,922,573</b>	<b>66,401</b>	<b>2,192,779</b>	<b>103,940</b>	<b>267,047</b>	<b>750,039</b>	<b>176,430</b>
26,034	2,428,885	9,016,126	19,737	578,662	24,142	57,245	186,737	43,884
703	49,547	64,864	73	11,874	380	937	608	387
<b>26,737</b>	<b>2,478,432</b>	<b>9,080,990</b>	<b>19,810</b>	<b>590,536</b>	<b>24,522</b>	<b>58,182</b>	<b>187,345</b>	<b>44,271</b>
13,543	1,710,368	4,917,554	13,255	363,292	14,630	40,168	117,192	28,402
.....	.....	206,581	.....	.....	.....	.....	.....	.....
1,435	151,582	867,033	721	63,516	2,060	7,230	15,066	4,864
4,343	177,283	616,159	1,589	67,935	2,626	5,990	12,757	4,398
.....	26,298	546,395	145	9,702	.....	3	8,443	1,071
1,396	123,288	653,050	1,519	27,706	1,723	2,353	13,442	2,548
.....	.....	9,060	.....	.....	.....	.....	.....	.....
<b>20,717</b>	<b>2,188,819</b>	<b>7,815,832</b>	<b>17,229</b>	<b>532,151</b>	<b>21,039</b>	<b>55,744</b>	<b>166,900</b>	<b>41,283</b>
<b>6,020</b>	<b>289,613</b>	<b>1,265,158</b>	<b>2,581</b>	<b>58,385</b>	<b>3,483</b>	<b>2,438</b>	<b>20,445</b>	<b>2,988</b>
348	17,651	80,521	276	5,987	321	607	1,933	490



# Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Parry Sound 5,867	Pene- tanguishene 4,658	Perth 5,408	Peter- borough 44,720	Petrolia 3,566	Pickering 1,606
Population.....						
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	795,153	257,133	315,647	4,538,690	276,662	96,368
Accumulated depreciation.....	184,318	79,266	93,745	1,007,204	77,908	14,575
Net fixed assets.....	610,835	177,867	221,902	3,531,486	198,754	81,793
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	2,414	14,102	18,675	304,827	15,344	5,763
Investment in government securities.....	16,270	55,000	81,000	.....	15,053	.....
Accounts receivable.....	5,193	1,466	1,647	125,813	8,887	1,097
Total current assets.....	23,877	70,568	101,322	430,640	39,284	6,860
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation.....	10,265	8,120	23,828	127,682	24,325	98
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	.....	1,110	.....	45,318	912	6,932
Total other assets.....	10,265	9,230	23,828	173,000	25,237	7,030
Equity in Ontario Hydro Systems.....	40,122	223,530	291,285	1,938,351	305,469	.....
	<b>685,099</b>	<b>481,195</b>	<b>638,337</b>	<b>6,073,477</b>	<b>568,744</b>	<b>95,683</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	72,000	.....	.....	1,029,500	.....	78,000
Accounts payable.....	664	103	.....	161,113	3,573	9,700
Other.....	7,810	1,602	4,287	4,046	3,836	200
Total liabilities.....	80,474	1,705	4,287	1,194,659	7,409	87,900
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....	40,122	223,530	291,285	1,938,351	305,469	.....
Other.....	146	913	159	1,628	14	.....
Total reserves.....	40,268	224,443	291,444	1,939,979	305,483	.....
<b>CAPITAL</b>						
Debentures redeemed.....	396,500	36,983	85,045	730,111	50,000	2,000
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.....	167,857	218,064	257,561	2,208,728	205,852	5,783
Frequency standardization expense charged this year.....	.....	.....	.....	.....	.....	.....
Total capital.....	564,357	255,047	342,606	2,938,839	255,852	7,783
	<b>685,099</b>	<b>481,195</b>	<b>638,337</b>	<b>6,073,477</b>	<b>568,744</b>	<b>95,683</b>

## B. OPERATING STATEMENTS

### REVENUE

Sales of electric energy.....	163,097	130,048	163,690	1,850,007	116,230	20,528
Other.....	1,569	3,195	4,492	7,566	3,268	.....

<b>Total revenue.....</b>	<b>164,666</b>	<b>133,243</b>	<b>168,182</b>	<b>1,857,573</b>	<b>119,498</b>	<b>20,528</b>
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### EXPENSE

Power purchased.....	60,680	77,204	114,553	1,105,491	57,488	11,248
Local generation.....	36,553	.....	.....	.....	.....	.....
Operation and maintenance.....	20,194	15,985	13,819	183,000	18,681	1,649
Administration.....	22,048	10,354	18,608	126,564	19,296	2,052
Fixed charges—interest and principal.....	6,564	.....	.....	94,113	.....	3,200
—depreciation.....	15,281	7,995	5,690	122,176	8,212	1,100
—other.....	.....	.....	.....	.....	.....	.....

<b>Total expense.....</b>	<b>161,320</b>	<b>111,538</b>	<b>152,670</b>	<b>1,631,344</b>	<b>103,677</b>	<b>19,249</b>
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<b>Net income or net expense.....</b>	<b>3,346</b>	<b>21,705</b>	<b>15,512</b>	<b>226,229</b>	<b>15,821</b>	<b>1,279</b>
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Number of customers.....	1,954	1,365	1,932	14,202	1,245	478
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Statements for the Year Ended December 31, 1958

Picton 4,976	Plattsville 478	Point Edward 2,760	Port Burwell 722	Port Colborne 14,750	Port Credit 6,350	Port Dalhousie 3,383	Port Dover 2,848	Port Elgin 1,719
\$ 376,367 92,678	\$ 41,176 3,595	\$ 217,203 42,003	\$ 67,686 24,938	\$ 906,980 95,709	\$ 463,652 65,763	\$ 196,419 17,934	\$ 246,602 59,433	\$ 156,349 22,108
283,689	37,581	175,200	42,748	811,271	397,889	178,485	187,169	134,241
647	9,995	32,682	4,101	16,385	88,652	17,141	14,678	2,683
3,000	4,500	49,431	.....	10,000	8,500	.....	.....	1,500
2,157	216	2,675	316	2,210	4,935	2,771	1,759	927
5,804	14,711	84,788	4,417	28,595	102,087	19,912	16,437	5,110
18,189	20	6,698	2,281	30,516	13,358	19,309	4,572	8,060
.....	3,533	400	5,961	231	4,142	972	19,023	.....
18,189	3,553	7,098	8,242	30,747	17,500	20,281	23,595	8,060
248,925	40,107	291,895	14,890	466,318	232,441	151,929	117,367	81,701
556,607	95,952	558,981	70,297	1,336,931	749,917	370,607	344,568	229,112
38,778	.....	.....	35,700	135,851	66,453	25,975	74,658	.....
175	6,566	2,340	79	67,814	10,469	1,762	605	735
13,160	.....	1,510	2,970	15,405	19,632	2,935	7,869	.....
52,113	6,566	3,850	38,749	219,070	96,554	30,672	83,132	735
248,925	40,107	291,895	14,890	466,318	232,441	151,929	117,367	81,701
90	.....	.....	.....	315	742	230	.....	103
249,015	40,107	291,895	14,890	466,633	233,183	152,159	117,367	81,804
24,404	5,237	17,000	4,300	207,149	72,065	43,525	34,342	37,787
.....	.....	.....	.....	.....	.....	.....	.....	.....
231,075	44,042	246,236	12,358	444,259	348,115	144,251	109,727	108,786
.....	.....	.....	.....	180	.....	.....	.....	.....
255,479	49,279	263,236	16,658	651,228	420,180	187,776	144,069	146,573
556,607	95,952	558,981	70,297	1,336,931	749,917	370,607	344,568	229,112
173,848	28,622	151,348	22,480	371,214	512,734	117,136	111,215	82,005
1,550	284	3,686	31	1,569	2,035	.....	38	51
175,398	28,906	155,034	22,511	372,783	514,769	117,136	111,253	82,056
111,265	23,141	122,201	8,824	198,816	354,757	59,541	61,430	47,730
.....	.....	.....	.....	.....	.....	.....	.....	.....
13,149	940	5,534	3,984	47,135	24,014	11,846	11,446	9,367
15,040	573	17,716	3,707	43,723	25,283	14,700	7,357	10,145
7,522	2	.....	2,963	15,902	13,757	5,003	6,509	.....
10,502	864	5,520	2,221	18,564	11,117	4,249	6,873	3,777
.....	.....	.....	.....	.....	.....	.....	.....	.....
157,478	25,520	150,971	21,699	324,140	428,928	95,339	93,615	71,019
17,920	3,386	4,063	812	48,643	85,841	21,797	17,638	11,037
1,906	188	813	439	4,570	2,596	1,113	1,447	1,035

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Port Hope	Port McNicol 997	Port Perry	Port Rowan	Port Stanley 1,415	Prescott
Population.....	7,690		2,212	793	1,415	5,373
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	582,858	58,172	122,396	52,486	152,928	255,944
Accumulated depreciation.....	115,247	12,032	20,508	8,951	47,576	78,441
Net fixed assets.....	467,611	46,140	101,888	43,535	105,352	177,503
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	92,130	14,755	29,490	6,372	50	24,024
Investment in government securities.....		26,000	16,000		9,000	30,000
Accounts receivable.....	1,758	3,249	475	1,460	2,471	9,967
Total current assets.....	93,888	44,004	45,965	7,832	11,521	63,991
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equipment at cost less depreciation..	38,715	3,820	3,135	1,059	6,030	14,060
Sinking fund on local debentures.....					13,546	190
Miscellaneous.....						
Total other assets.....	38,715	3,820	3,135	1,059	19,576	14,250
Equity in Ontario Hydro Systems....	401,824	48,049	78,081	27,326	147,016	218,653
	<b>1,002,038</b>	<b>142,013</b>	<b>229,069</b>	<b>79,752</b>	<b>283,465</b>	<b>474,397</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	120,500					2,700
Accounts payable.....		26	1,079	2,877	5,139	771
Other.....	37,920	417	1,411	261	824	3,223
Total liabilities.....	158,420	443	2,490	3,138	5,963	6,694
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	401,824	48,049	78,081	27,326	147,016	218,653
Other.....			100		39	
Total reserves.....	401,824	48,049	78,181	27,326	147,055	218,653
<b>CAPITAL</b>						
Debentures redeemed.....	123,500	9,804	19,882	11,000	18,950	21,471
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	318,294	83,717	128,516	41,993	111,497	227,579
Frequency standardization expense charged this year.....				3,705		
Total capital.....	441,794	93,521	148,398	49,288	130,447	249,050
	<b>1,002,038</b>	<b>142,013</b>	<b>229,069</b>	<b>79,752</b>	<b>283,465</b>	<b>474,397</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	413,353	51,738	58,857	18,272	64,811	156,214
Other.....	2,081	1,661	1,041	123	435	2,149
Total revenue.....	<b>415,434</b>	<b>53,399</b>	<b>59,898</b>	<b>18,395</b>	<b>65,246</b>	<b>158,363</b>
<b>EXPENSE</b>						
Power purchased.....	255,994	35,000	41,948	10,232	46,394	113,097
Local generation.....						
Operation and maintenance.....	31,061	3,847	5,953	1,186	11,409	13,289
Administration.....	33,503	2,956	5,784	1,088	8,317	17,459
Fixed charges—interest and principal.....	21,224					1,440
—depreciation.....	15,259	1,590	3,103	1,335	4,711	7,897
—other.....						
Total expense.....	<b>357,041</b>	<b>43,393</b>	<b>56,788</b>	<b>13,841</b>	<b>70,831</b>	<b>153,182</b>
Net income or net expense.....	<b>58,393</b>	<b>10,006</b>	<b>3,110</b>	<b>4,554</b>	<b>5,585</b>	<b>5,181</b>
Number of customers.....	2,740	464	805	331	1,138	1,720



Statements for the Year Ended December 31, 1958

Preston	Priceville	Princeton	Queenston	Renfrew	Richmond	Richmond Hill	Ridgetown	Ripley
10,593	163	428	425	8,500	916	14,191	2,468	448
\$ 983,664 180,250	\$ 15,540 4,507	\$ 29,874 5,042	\$ 29,418 6,087	\$ 1,224,330 245,499	\$ 55,843 3,857	\$ 787,252 58,600	\$ 180,267 23,151	\$ 36,595 5,537
803,414	11,033	24,832	23,331	978,831	51,986	728,652	157,116	31,058
44,472	1,397	2,189	9,757	38,274	4,657	12,932	5,902	6,656
.....	5,500	3,000	8,000	45,000	.....	.....	.....	10,000
6,329	37	396	621	33,260	828	12,033	1,215	179
50,801	6,934	5,585	18,378	116,534	5,485	24,965	7,117	16,835
62,567	55	21	.....	27,395	1,476	18,590	3,864	319
3,053	.....	.....	.....	26	.....	9,288	61	.....
65,620	55	21	.....	27,421	1,476	27,878	3,925	319
867,162	3,691	33,169	25,886	90,361	18,310	152,430	143,575	29,841
1,786,997	21,713	63,607	67,595	1,213,147	77,257	933,925	311,733	78,053
243,200	3,900	2,250	.....	202,586	6,800	455,444	53,686	.....
2,991	111	10	147	11,365	.....	14,053	3,407	.....
13,046	87	570	155	8,453	827	29,254	2,472	453
259,237	4,098	2,830	302	222,404	7,627	498,751	59,565	453
867,162	3,691	33,169	25,886	90,361	18,310	152,430	143,575	29,841
.....	.....	.....	31	258	.....	1,580	3,547	.....
867,162	3,691	33,169	25,917	90,619	18,310	154,010	147,122	29,841
234,600	8,266	3,800	9,500	568,650	7,087	46,177	27,770	12,745
.....	.....	.....	.....	.....	.....	.....	.....	.....
425,998	5,658	25,552	31,876	331,474	44,233	234,987	79,145	35,014
.....	.....	1,744	.....	.....	.....	.....	1,869	.....
660,598	13,924	27,608	41,376	900,124	51,320	281,164	105,046	47,759
1,786,997	21,713	63,607	67,595	1,213,147	77,257	933,925	311,733	78,053
503,575	3,630	12,730	16,739	295,451	23,821	439,120	84,269	15,554
1,084	206	170	235	3,474	4	346	1,235	295
504,659	3,836	12,900	16,974	298,925	23,825	439,466	85,504	15,849
289,271	1,867	9,455	10,750	96,490	12,398	267,801	50,615	11,231
.....	.....	.....	.....	33,593	.....	.....	.....	.....
53,176	234	221	698	28,425	2,236	15,383	8,765	619
24,674	399	905	912	31,032	953	27,349	9,755	1,410
28,034	432	400	.....	23,449	635	34,210	5,211	.....
25,774	470	788	794	28,946	1,192	15,663	4,279	917
.....	.....	.....	.....	.....	.....	.....	.....	.....
420,929	3,492	11,769	13,154	241,935	17,414	360,406	78,625	14,177
83,730	434	1,131	3,820	56,990	6,411	79,060	6,879	1,672
3,128	64	168	152	2,617	277	4,190	1,004	215

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Riverside	Rockland	Rockwood	Rodney	Rosseau	Russell
Population.....	15,559	2,852	860	1,025	207	562
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	640,322	90,800	45,029	55,576	21,534	36,721
Accumulated depreciation.....	135,636	8,674	8,595	18,834	5,734	6,346
Net fixed assets.....	504,686	82,126	36,434	36,742	15,800	30,375
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	23,849	12,049	7,787	1,096	2,698	6,284
Investment in government securities.....			1,500	5,200	1,500	12,000
Accounts receivable.....	9,938	8,227	153	77	316	1,928
Total current assets.....	33,787	20,276	9,440	6,373	4,514	20,212
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation.....	42,197	1,991	119	197		131
Sinking fund on local debentures.....						
Miscellaneous.....	566	1,251	195		28	
Total other assets.....	42,763	3,242	314	197	28	131
Equity in Ontario Hydro Systems.....	354,145	9,603	39,745	48,294	13,070	20,924
	935,381	115,247	85,933	91,606	33,412	71,642
<b>LIABILITIES</b>						
Debentures outstanding.....	38,433	21,000	7,161			
Accounts payable.....	365	5,393	729	261	65	18
Other.....	9,702	2,260	634	385	36	325
Total liabilities.....	48,500	28,653	8,524	646	101	343
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	354,145	9,603	39,745	48,294	13,070	20,924
Other.....	232	547		73	49	
Total reserves.....	354,377	10,150	39,745	48,367	13,119	20,924
<b>CAPITAL</b>						
Debentures redeemed.....	124,067	4,000	5,339	8,500	11,933	8,808
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	408,437	72,444	32,325	34,093	8,259	41,567
Frequency standardization expense charged this year.....						
Total capital.....	532,504	76,444	37,664	42,593	20,192	50,375
	935,381	115,247	85,933	91,606	33,412	71,642
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	326,529	50,209	24,844	26,610	6,482	12,157
Other.....	2,876	163	246	342	170	583
Total revenue.....	329,405	50,372	25,090	26,952	6,652	12,740
<b>EXPENSE</b>						
Power purchased.....	193,597	24,800	15,398	18,414	3,399	7,878
Local generation.....						
Operation and maintenance.....	31,665	7,153	2,112	2,797	670	963
Administration.....	41,863	3,213	2,637	2,829	629	1,334
Fixed charges—interest and principal	10,161	1,967	589	46		
—depreciation.....	16,525	2,129	1,228	1,792	636	946
—other.....						
Total expense.....	293,811	39,262	21,964	25,878	5,334	11,121
Net income or net expense.....	35,594	11,110	3,126	1,074	1,318	1,619
Number of customers.....	4,953	679	295	434	121	200

## Statements for the Year Ended December 31, 1958

St. Catharines	St. Clair Beach	St. George	St. Jacobs	St. Mary's	St. Thomas	Sandwich East Twp.	Sandwich West Twp.
41,156	1,125	732	722	4,266	19,503	21,289	22,074
\$ 3,546,216 496,360	\$ 80,491 14,426	\$ 43,189 1,713	\$ 45,711 8,837	\$ 403,881 107,223	\$ 1,444,130 419,005	\$ 1,203,127 212,523	\$ 1,532,716 235,727
3,049,856	66,065	41,476	36,874	296,658	1,025,125	990,604	1,296,989
192,669	6,068	7,309	3,706	29,849	300	959	118,732
100,000	.....	6,000	2,000	42,500	35,000	50,500	.....
164,708	363	1,735	1,244	2,108	59,280	53,185	29,362
457,377	6,431	15,044	6,950	74,457	94,580	104,644	148,094
149,703	703	631	10	45,093	62,888	141,960	119,642
.....	.....	.....	.....	.....	.....	.....	.....
2,897	.....	.....	.....	4,053	72,226	1,001	1,332
152,600	703	631	10	49,146	135,114	142,961	120,974
3,088,099	28,696	46,409	59,662	409,813	1,605,580	136,232	174,629
<b>6,747,932</b>	<b>101,895</b>	<b>103,560</b>	<b>103,496</b>	<b>830,074</b>	<b>2,860,399</b>	<b>1,374,441</b>	<b>1,740,686</b>
.....	7,800	.....	.....	50,877	.....	988,000	1,126,000
218,997	360	3,467	322	2	25,369	40,063	3,109
49,981	1,150	611	100	3,454	44,395	34,308	93,471
268,978	9,310	4,078	422	54,333	69,764	1,062,371	1,222,580
3,088,099	28,696	46,409	59,662	409,813	1,605,580	136,232	174,629
3,905	.....	.....	.....	44	180	.....	303
3,092,004	28,696	46,409	59,662	409,857	1,605,760	136,232	174,932
302,023	10,541	6,000	6,000	143,384	138,944	59,104	74,000
.....	.....	.....	.....	.....	.....	.....	.....
3,084,927	53,348	47,297	37,412	222,500	1,045,931	116,734	269,174
.....	.....	224	.....	.....	.....	.....	.....
3,386,950	63,889	53,073	43,412	365,884	1,184,875	175,838	343,174
<b>6,747,932</b>	<b>101,895</b>	<b>103,560</b>	<b>103,496</b>	<b>830,074</b>	<b>2,860,399</b>	<b>1,374,441</b>	<b>1,740,686</b>
2,273,472	38,555	23,140	24,933	370,688	783,370	542,315	679,327
7,922	54	497	376	5,255	4,441	10,001	3,940
<b>2,281,394</b>	<b>38,609</b>	<b>23,637</b>	<b>25,309</b>	<b>375,943</b>	<b>787,811</b>	<b>552,316</b>	<b>683,267</b>
1,456,161	20,590	16,120	19,094	272,208	455,909	201,992	312,822
.....	.....	.....	.....	.....	.....	.....	.....
167,122	2,776	1,855	1,581	16,283	116,859	108,027	69,994
146,415	2,800	1,811	1,308	21,120	69,382	77,611	66,732
.....	1,569	.....	.....	5,649	383	85,630	100,586
83,225	2,044	948	1,206	11,381	43,040	29,796	36,492
.....	.....	.....	.....	.....	.....	.....	.....
<b>1,852,923</b>	<b>29,779</b>	<b>20,734</b>	<b>23,189</b>	<b>326,641</b>	<b>685,573</b>	<b>503,056</b>	<b>586,626</b>
<b>428,471</b>	<b>8,830</b>	<b>2,903</b>	<b>2,120</b>	<b>49,302</b>	<b>102,238</b>	<b>49,260</b>	<b>96,641</b>
13,663	410	275	233	1,594	6,870	5,965	6,435



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Sarnia	Scarborough Twp.	Seaforth	Shelburne	Simcoe	Smith's Falls
Population.....	46,913	168,281	2,202	1,274	8,279	8,917
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	3,694,486	14,539,504	202,436	103,068	624,225	657,170
Accumulated depreciation.....	809,382	1,149,955	18,099	30,942	134,144	169,983
Net fixed assets.....	2,885,104	13,389,549	184,337	72,126	490,081	487,187
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	600	546,480	15,448	8,247	503	12,396
Investment in government securities.....		927,500	9,000			20,000
Accounts receivable.....	126,255	285,297	1,935	1,605	2,205	2,814
Total current assets.....	126,855	1,759,277	26,383	9,852	2,708	35,210
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	326,944	353,046	14,639	1,232	35,139	22,116
Sinking fund on local debentures.....		249,094				
Miscellaneous.....	2,916	188,001	597			458
Total other assets.....	329,860	790,141	15,236	1,232	35,139	22,574
Equity in Ontario Hydro Systems.....	2,569,172	2,231,651	196,911	75,348	457,383	455,491
	<b>5,910,991</b>	<b>18,170,618</b>	<b>422,867</b>	<b>158,558</b>	<b>985,301</b>	<b>1,000,462</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	248,900	8,445,150	29,300			12,500
Accounts payable.....	276,628	566,424	1,732		25,412	156
Other.....	175,418	927,698	2,910	156	9,726	920
Total liabilities.....	700,946	9,939,272	33,942	156	35,138	13,576
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	2,569,172	2,231,651	196,911	75,348	457,373	455,491
Other.....	14,562	12,579		49		179
Total reserves.....	2,583,734	2,244,230	196,911	75,397	457,373	455,670
<b>CAPITAL</b>						
Debentures redeemed.....	539,100	1,352,429	45,700	16,991	75,435	135,287
Local sinking fund.....		249,094				
Accumulated net income invested in plant or held as working funds..	2,087,211	4,385,593	146,314	66,014	417,355	395,929
Frequency standardization expense charged this year.....						
Total capital.....	2,626,311	5,987,116	192,014	83,005	492,790	531,216
	<b>5,910,991</b>	<b>18,170,618</b>	<b>422,867</b>	<b>158,558</b>	<b>985,301</b>	<b>1,000,462</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	2,313,202	6,456,048	83,116	49,271	370,428	300,721
Other.....	40,953	75,124	814	77	540	2,633
<b>Total revenue.....</b>	<b>2,354,155</b>	<b>6,531,172</b>	<b>83,930</b>	<b>49,348</b>	<b>370,968</b>	<b>303,354</b>
<b>EXPENSE</b>						
Power purchased.....	1,556,965	3,746,987	45,860	33,449	237,041	193,628
Local generation.....						
Operation and maintenance.....	266,575	297,552	14,942	2,684	37,620	21,035
Administration.....	198,875	418,029	6,775	3,266	21,178	34,062
Fixed charges—interest and principal	45,705	731,696	2,940		1,468	3,142
—depreciation.....	97,941	306,609	4,466	3,150	17,884	18,890
—other.....						
<b>Total expense.....</b>	<b>2,166,061</b>	<b>5,500,873</b>	<b>74,983</b>	<b>42,549</b>	<b>315,191</b>	<b>270,757</b>
<b>Net income or net expense.....</b>	<b>188,094</b>	<b>1,030,299</b>	<b>8,947</b>	<b>6,799</b>	<b>55,777</b>	<b>32,597</b>
Number of customers.....	14,319	54,338	810	551	3,113	3,252

Statements for the Year Ended December 31, 1958

Smithville 825	Southamp- ton 1,777	Springfield 551	Stamford Twp. 28,476	Stayner 1,539	Stirling 1,306	Stoney Creek 5,859	Stouffville 2,652	Stratford 20,532
\$ 54,574 10,711	\$ 150,484 14,556	\$ 35,450 10,798	\$ 1,999,739 260,380	\$ 93,512 17,757	\$ 108,674 32,367	\$ 301,845 34,253	\$ 147,597 20,779	\$ 1,776,032 516,869
43,863	135,928	24,652	1,739,359	75,755	76,307	267,592	126,818	1,259,163
3,509	11,901	5,693	142,630	5,984	27,190	50,381	3,306	2,000
3,000	.....	500	8,000	1,000	.....	.....	.....	180,000
167	611	608	19,401	947	1,652	1,267	734	13,094
6,676	12,512	6,801	170,031	7,931	28,842	51,648	4,040	195,094
1,014	6,085	139	100,220	946	3,350	9,373	1,647	70,818
.....	106	2,451	2,626	2,846	826	1,540	170	2,289
1,014	6,191	2,590	102,846	3,792	4,176	10,913	1,817	73,107
26,471	78,125	27,885	553,460	68,535	47,475	57,710	87,634	1,830,664
<b>78,024</b>	<b>232,756</b>	<b>61,928</b>	<b>2,565,696</b>	<b>156,013</b>	<b>156,800</b>	<b>387,863</b>	<b>220,309</b>	<b>3,358,028</b>
.....	8,937	.....	935,635	.....	9,907	55,007	17,903	.....
69	140	37	37,943	4,030	77	2,719	4,259	21,766
298	1,567	95	19,851	486	671	4,926	4,880	113,554
367	10,644	132	993,429	4,516	10,655	62,652	27,042	135,320
26,471	78,125	27,885	553,460	68,535	47,475	57,710	87,634	1,830,664
.....	.....	314	37,779	50	.....	.....	51	915
26,471	78,125	28,199	591,239	68,585	47,475	57,710	87,685	1,831,579
15,000	33,587	9,500	464,643	9,558	13,093	24,993	16,745	455,800
.....	.....	.....	.....	.....	.....	.....	.....	.....
39,686	110,400	24,097	516,385	73,354	85,577	242,508	88,837	935,666
3,500	.....	.....	.....	.....	.....	.....	.....	337
51,186	143,987	33,597	981,028	82,912	98,670	267,501	105,582	1,391,129
<b>78,024</b>	<b>232,756</b>	<b>61,928</b>	<b>2,565,696</b>	<b>156,013</b>	<b>156,800</b>	<b>387,863</b>	<b>220,309</b>	<b>3,358,028</b>
33,547	72,516	13,096	890,351	50,606	45,849	176,251	87,400	824,782
226	183	40	1,905	53	1,027	706	138	21,538
<b>33,773</b>	<b>72,699</b>	<b>13,136</b>	<b>892,256</b>	<b>50,659</b>	<b>46,876</b>	<b>176,957</b>	<b>87,538</b>	<b>846,320</b>
18,645	44,071	7,314	492,809	36,259	23,059	117,729	63,164	498,680
4,565	10,186	474	105,706	4,016	5,936	5,763	3,273	90,048
4,626	6,640	1,115	61,364	3,531	5,696	16,292	8,088	83,580
.....	1,517	.....	81,709	.....	990	6,285	1,472	5,378
1,428	3,563	1,101	47,068	2,504	1,965	6,993	3,245	53,513
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>29,264</b>	<b>65,977</b>	<b>10,004</b>	<b>788,656</b>	<b>46,310</b>	<b>37,646</b>	<b>153,062</b>	<b>79,242</b>	<b>731,199</b>
4,509	6,722	3,132	103,600	4,349	9,230	23,895	8,296	115,121
379	1,078	178	8,587	613	504	1,829	922	6,871

# Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Strathroy	Streetsville	Sunderland	Sundridge	Sutton	Swansea
Population.....	4,719	3,766	575	753	1,395	8,972
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	351,834	297,394	40,586	52,356	125,237	541,136
Accumulated depreciation.....	102,908	32,465	7,682	6,203	30,969	107,763
Net fixed assets.....	248,926	264,929	32,904	46,153	94,268	433,373
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	7,443	12,903	4,824	3,180	311	226,096
Investment in government securities.....			2,000	10,000	7,000	
Accounts receivable.....	3,054	7,721	188	317	4,674	4,114
Total current assets.....	10,497	20,624	7,012	13,497	11,985	230,210
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equipment at cost less depreciation..	13,485	1,606	508	2,426	456	21,740
Sinking fund on local debentures.....						
Miscellaneous.....	20	69		8,812		2,860
Total other assets.....	13,505	1,675	508	11,238	456	24,600
Equity in Ontario Hydro Systems....	312,299	61,709	35,478	5,506	76,495	401,042
	<b>585,227</b>	<b>348,937</b>	<b>75,902</b>	<b>76,394</b>	<b>183,204</b>	<b>1,089,225</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	8,400	121,177		27,800		91,481
Accounts payable.....	461	10,257	64	178	1,425	3,065
Other.....	5,766	7,159	105	31	880	13,574
Total liabilities.....	14,627	138,593	169	28,009	2,305	108,120
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	312,299	61,709	35,478	5,506	76,495	401,042
Other.....	98	1,821			349	759
Total reserves.....	312,397	63,530	35,478	5,506	76,844	401,801
<b>CAPITAL</b>						
Debentures redeemed.....	55,489	31,684	4,628	7,200	26,000	158,620
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.	202,714	115,130	35,627	35,679	78,055	420,684
Frequency standardization expense charged this year.....						
Total capital.....	258,203	146,814	40,255	42,879	104,055	579,304
	<b>585,227</b>	<b>348,937</b>	<b>75,902</b>	<b>76,394</b>	<b>183,204</b>	<b>1,089,225</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	175,850	145,559	21,880	25,104	57,864	306,833
Other.....	584	1,288	146	177	243	6,847
Total revenue.....	<b>176,434</b>	<b>146,847</b>	<b>22,026</b>	<b>25,281</b>	<b>58,107</b>	<b>313,680</b>
<b>EXPENSE</b>						
Power purchased.....	111,794	97,371	14,279	11,660	40,135	190,471
Local generation.....		5,275				
Operation and maintenance.....	17,113	5,104	1,348	1,854	4,514	36,858
Administration.....	20,525	10,561	1,453	1,545	6,523	27,256
Fixed charges—interest and principal	1,262	10,159		2,808	24	13,728
—depreciation.....	10,610	6,814	1,072	1,234	3,546	14,328
—other.....						
Total expense.....	<b>161,304</b>	<b>135,284</b>	<b>18,152</b>	<b>19,101</b>	<b>54,742</b>	<b>282,641</b>
Net income or net expense.....	<b>15,130</b>	<b>11,563</b>	<b>3,874</b>	<b>6,180</b>	<b>3,365</b>	<b>31,039</b>
Number of customers.....	1,678	1,357	252	293	866	3,233



## Statements for the Year Ended December 31, 1958

Tara	Tavistock	Tecumseh	Teeswater	Thamesford	Thamesville	Thedford	Thornbury	Thorndale
496	1,169	4,401	856	771	1,020	723	1,112	428
\$ 39,901 9,053	\$ 92,958 27,785	\$ 201,122 56,476	\$ 70,904 11,258	\$ 62,926 10,627	\$ 91,725 20,479	\$ 45,637 7,158	\$ 130,689 10,490	\$ 28,575 8,509
30,848	65,173	144,646	59,646	52,299	71,246	38,479	120,199	20,066
2,063	12,215	6,442	1,816	1,150	6,814	4,125	2,283	4,143
8,000	.....	.....	19,000	.....	7,000	14,912	4,000	3,000
243	974	4,073	64	172	1,082	2,119	3,082	176
10,306	13,189	10,515	20,880	1,322	14,896	21,156	9,365	7,319
105	6,347	21,916	567	69	2,262	907	833	68
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	397	.....	99	.....	5,882	239	.....	1,070
105	6,744	21,916	666	69	8,144	1,146	833	1,138
31,567	146,637	108,442	47,340	59,529	64,576	37,173	16,467	28,490
<b>72,826</b>	<b>231,743</b>	<b>285,519</b>	<b>128,532</b>	<b>113,219</b>	<b>158,862</b>	<b>97,954</b>	<b>146,864</b>	<b>57,013</b>
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	23,931	.....	.....	2,300	.....	.....	26,057	.....
237	899	242	602	.....	144	33	28	47
.....	1,187	1,965	54	468	1,199	334	385	6
237	26,017	2,207	656	2,768	1,343	367	26,470	53
31,567	146,637	108,442	47,340	59,529	64,576	37,173	16,467	28,490
.....	.....	.....	.....	7	125	34	.....	28
31,567	146,637	108,442	47,340	59,536	64,701	37,207	16,467	28,518
14,264	11,713	26,000	21,296	6,058	11,188	16,500	59,943	3,086
.....	.....	.....	.....	.....	.....	.....	.....	.....
26,758	47,376	148,870	59,240	44,857	81,630	43,880	43,984	25,356
.....	.....	.....	.....	.....	.....	.....	.....	.....
41,022	59,089	174,870	80,536	50,915	92,818	60,380	103,927	28,442
<b>72,826</b>	<b>231,743</b>	<b>285,519</b>	<b>128,532</b>	<b>113,219</b>	<b>158,862</b>	<b>97,954</b>	<b>146,864</b>	<b>57,013</b>
15,529	49,817	80,538	29,098	35,354	41,159	22,897	43,423	12,764
325	269	1,241	636	115	214	396	306	85
<b>15,854</b>	<b>50,086</b>	<b>81,779</b>	<b>29,734</b>	<b>35,469</b>	<b>41,373</b>	<b>23,293</b>	<b>43,729</b>	<b>12,849</b>
12,878	30,264	45,669	22,368	21,056	24,856	14,960	20,802	8,162
.....	.....	.....	.....	.....	.....	.....	7,255	.....
1,507	6,408	13,414	1,571	865	5,073	1,333	3,770	936
1,050	3,206	13,928	2,104	1,931	3,134	2,112	3,318	1,124
.....	2,260	4	11	187	.....	.....	2,861	.....
1,108	2,885	5,734	1,792	1,544	2,488	1,158	1,898	861
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>16,543</b>	<b>45,023</b>	<b>78,749</b>	<b>27,846</b>	<b>25,583</b>	<b>35,551</b>	<b>19,563</b>	<b>39,904</b>	<b>11,083</b>
689	5,063	3,030	1,888	9,886	5,822	3,730	3,825	1,766
233	495	1,318	339	313	436	296	512	133

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Thornton	Thorold	Tilbury	Tillsonburg	Toronto	Toronto Twp.
Population.....	295	8,272	2,944	6,370	662,401	53,219
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	16,353	531,247	204,061	643,349	88,665,984	4,627,603
Accumulated depreciation.....	9,403	72,353	57,268	60,766	24,945,440	475,450
Net fixed assets.....	6,950	458,894	146,793	582,583	63,720,544	4,152,153
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	3,870	51,503	9,171	200	79,582	145,798
Investment in government securities.....			10,000		1,945,085	307,337
Accounts receivable.....	599	4,084	1,697	2,038	5,905,926	252,992
Total current assets.....	4,469	55,587	20,868	2,238	7,930,593	706,127
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	106	38,227	9,547	82,992	5,549,184	308,020
Sinking fund on local debentures.....					68,756	
Miscellaneous.....		239	77	178	561,178	51,119
Total other assets.....	106	38,466	9,624	83,170	6,179,118	359,139
Equity in Ontario Hydro Systems....	11,482	512,747	193,977	331,203	68,523,741	1,042,953
	<b>23,007</b>	<b>1,065,694</b>	<b>371,262</b>	<b>999,194</b>	<b>146,353,996</b>	<b>6,260,372</b>
<b>LIABILITIES</b>						
Debentures outstanding.....		102,884	45,000	115,488	13,562,500	1,192,875
Accounts payable.....	3	17,940		13,462	2,828,333	86,110
Other.....	67	35,748	980	12,661	574,716	348,149
Total liabilities.....	70	156,572	45,980	141,611	16,965,549	1,627,134
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	11,482	512,747	193,977	331,203	68,523,741	1,042,953
Other.....		320	3,699	3,150	1,359,786	20,923
Total reserves.....	11,482	513,067	197,676	334,353	69,883,527	1,063,876
<b>CAPITAL</b>						
Debentures redeemed.....	7,200	27,116	19,000	100,512	30,525,935	415,577
Local sinking fund.....					68,756	
Accumulated net income invested in plant or held as working funds..	4,255	368,939	114,783	456,548	28,910,229	3,153,785
Frequency standardization expense charged this year.....			6,177	33,830		
Total capital.....	11,455	396,055	127,606	523,230	59,504,920	3,569,362
	<b>23,007</b>	<b>1,065,694</b>	<b>371,262</b>	<b>999,194</b>	<b>146,353,996</b>	<b>6,260,372</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	6,286	491,793	86,240	277,217	34,854,893	2,754,664
Other.....	1	1,156	1,122	1,837	385,518	13,799
Total revenue.....	<b>6,287</b>	<b>492,949</b>	<b>87,362</b>	<b>279,054</b>	<b>35,240,411</b>	<b>2,768,463</b>
<b>EXPENSE</b>						
Power purchased.....	3,949	374,984	46,662	141,732	19,996,386	1,775,442
Local generation.....						
Operation and maintenance.....	337	50,668	10,996	32,346	4,698,997	121,768
Administration.....	342	23,456	10,487	26,833	3,971,684	151,206
Fixed charges—interest and principal.....		9,395	4,553	15,702	946,303	117,063
—depreciation.....	431	11,936	5,987	14,112	2,914,564	99,814
—other.....						
Total expense.....	<b>5,059</b>	<b>470,439</b>	<b>78,685</b>	<b>230,725</b>	<b>32,527,934</b>	<b>2,265,293</b>
Net income or net expense.....	<b>1,228</b>	<b>22,510</b>	<b>8,677</b>	<b>48,329</b>	<b>2,712,477</b>	<b>503,170</b>
Number of customers.....	100	2,524	1,005	2,402	204,294	14,042

Statements for the Year Ended December 31, 1958

Tottenham 732	Trafalgar Twp. 25,107	Trenton 12,105	Tweed 1,642	Uxbridge 2,236	Vankleek Hill 1,670	Victoria Harbour 951	Walkerton 3,717	Wallace- burg 7,997
\$ 35,829 7,599	\$ 1,427,647 49,328	\$ 890,484 224,986	\$ 134,702 13,964	\$ 127,028 21,266	\$ 113,445 19,802	\$ 52,057 9,137	\$ 236,086 20,545	\$ 851,265 200,481
28,230	1,378,319	665,498	120,738	105,762	93,643	42,920	215,541	650,784
6,503	75	5,421	4,038	14,493	6,387	3,549	36,043	144,312
5,500	.....	65,000	24,500	12,500	.....	.....	43,000	.....
1,447	39,726	13,390	804	877	35	991	5,458	9,443
13,450	39,801	83,811	29,342	27,870	6,422	4,540	84,501	153,755
496	111,545	49,590	699	11,633	.....	1,142	25,382	83,273
.....	18,103	500	.....	200	.....	49	128	.....
496	129,648	50,090	699	11,833	.....	1,191	25,510	83,273
37,704	155,029	576,203	58,928	88,260	6,866	24,316	136,868	813,690
<b>79,880</b>	<b>1,702,797</b>	<b>1,375,602</b>	<b>209,707</b>	<b>233,725</b>	<b>106,931</b>	<b>72,967</b>	<b>462,420</b>	<b>1,701,502</b>
3,836	836,064	.....	.....	.....	38,000	11,000	.....	.....
.....	78,743	4,269	244	1,780	.....	418	39,046	9
738	34,475	16,118	474	1,922	2,025	5	2,444	7,195
4,574	949,282	20,387	718	3,702	40,025	11,423	41,490	7,204
37,704	155,029	576,203	58,928	88,260	6,866	24,316	136,868	813,690
.....	2,100	.....	338	211	.....	.....	573	232
37,704	157,129	576,203	59,266	88,471	6,866	24,316	137,441	813,922
17,599	126,641	164,587	19,000	15,364	8,000	7,879	56,748	71,536
.....	.....	.....	.....	.....	.....	.....	.....	.....
20,003	469,745	614,425	130,723	126,188	52,040	29,349	226,741	808,840
.....	.....	.....	.....	.....	.....	.....	.....	.....
37,602	596,386	779,012	149,723	141,552	60,040	37,228	283,489	880,376
<b>79,880</b>	<b>1,702,797</b>	<b>1,375,602</b>	<b>209,707</b>	<b>233,725</b>	<b>106,931</b>	<b>72,967</b>	<b>462,420</b>	<b>1,701,502</b>
20,945	757,305	577,124	39,083	75,018	42,129	20,676	120,151	429,668
255	3,262	3,981	1,192	642	360	.....	3,241	5,265
<b>21,200</b>	<b>760,567</b>	<b>581,105</b>	<b>40,275</b>	<b>75,660</b>	<b>42,489</b>	<b>20,676</b>	<b>123,392</b>	<b>434,933</b>
13,440	404,492	460,001	30,517	54,583	16,844	11,557	84,471	285,955
1,693	66,438	25,491	2,490	7,118	2,826	2,232	8,938	27,198
1,126	44,481	33,545	4,605	5,979	4,030	1,562	14,952	33,987
838	76,436	16	.....	.....	3,493	1,238	.....	.....
980	27,260	24,803	3,123	3,245	2,887	1,357	5,046	23,719
<b>18,077</b>	<b>619,107</b>	<b>543,856</b>	<b>40,735</b>	<b>70,925</b>	<b>30,080</b>	<b>17,946</b>	<b>113,407</b>	<b>370,859</b>
3,123	141,460	37,249	460	4,735	12,409	2,730	9,985	64,074
272	5,588	3,894	602	845	529	462	1,258	2,742



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Wardsville	Warkworth	Wasaga Beach	Waterdown	Waterford	Waterloo
Population.....	330	527	440	1,828	2,040	18,317
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	23,211	44,830	132,488	103,765	111,283	1,506,850
Accumulated depreciation.....	6,482	6,066	36,394	25,372	23,615	300,357
Net fixed assets.....	16,729	38,764	96,094	78,393	87,668	1,206,493
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	1,476	1,456	19,943	8,820	50	300
Investment in government securities	1,500	3,000	15,000			
Accounts receivable.....	660	293	2,715	1,238	515	20,479
Total current assets.....	3,636	4,749	37,658	10,058	565	20,779
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation.....		714	11,029	414	3,281	122,849
Sinking fund on local debentures.....						
Miscellaneous.....	1,811		600	368	150	6,766
Total other assets.....	1,811	714	11,629	782	3,431	129,615
Equity in Ontario Hydro Systems.....	14,924	17,742	10,626	76,955	106,817	1,042,055
	<b>37,100</b>	<b>61,969</b>	<b>156,007</b>	<b>166,188</b>	<b>198,481</b>	<b>2,398,942</b>
<b>LIABILITIES</b>						
Debentures outstanding.....		8,000	76,000	11,000	19,400	490,500
Accounts payable.....	2,476	1	197	15	4,333	27,524
Other.....	115	154	80	517	1,667	25,192
Total liabilities.....	2,591	8,155	76,277	11,532	25,400	543,216
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	14,924	17,742	10,626	76,955	106,817	1,042,055
Other.....	25		146			66
Total reserves.....	14,949	17,742	10,772	76,955	106,817	1,042,121
<b>CAPITAL</b>						
Debentures redeemed.....	7,562	11,000	34,000	12,000	8,346	265,500
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	11,998	25,072	34,958	65,701	66,417	548,165
Frequency standardization expense charged this year.....					8,499	60
Total capital.....	19,560	36,072	68,958	77,701	66,264	813,605
	<b>37,100</b>	<b>61,969</b>	<b>156,007</b>	<b>166,188</b>	<b>198,481</b>	<b>2,398,942</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	9,079	14,140	52,008	55,886	53,355	756,822
Other.....	192	93	1,681	289	10	1,849
<b>Total revenue.....</b>	<b>9,271</b>	<b>14,233</b>	<b>53,689</b>	<b>56,175</b>	<b>53,365</b>	<b>758,671</b>
<b>EXPENSE</b>						
Power purchased.....	6,351	7,854	23,583	34,740	34,318	460,371
Local generation.....						
Operation and maintenance.....	291	1,336	5,553	5,838	6,806	60,198
Administration.....	455	953	6,799	4,295	3,899	53,200
Fixed charges—interest and principal	72	2	7,880	1,592	1,589	56,640
—depreciation.....	681	1,027	3,994	2,973	3,057	39,557
—other.....						
<b>Total expense.....</b>	<b>7,850</b>	<b>11,172</b>	<b>47,809</b>	<b>49,438</b>	<b>49,669</b>	<b>669,966</b>
<b>Net income or net expense.....</b>	<b>1,421</b>	<b>3,061</b>	<b>5,880</b>	<b>6,737</b>	<b>3,696</b>	<b>88,705</b>
Number of customers.....	135	237	981	576	755	5,758

## Statements for the Year Ended December 31, 1958

Watford 1,210	Wau- baushene V. A.	Welland 17,559	Wellesley 677	Wellington 1,009	West Lorne 1,090	Weston 9,485	Westport 701	Wheatley 1,250
\$ 84,012 25,723	\$ 41,530 6,752	\$ 1,626,712 343,127	\$ 42,540 5,757	\$ 61,135 23,969	\$ 99,729 28,421	\$ 1,017,764 174,751	\$ 35,134 3,989	\$ 128,088 20,098
58,289	34,778	1,283,585	36,783	37,166	71,308	843,013	31,145	107,990
7,986	.....	184,789	1,912	1,658	13,812	30,060	3,749	9,001
13,166	.....	22,000	1,000	20,000	5,000	.....	8,000	.....
1,963	918	9,413	103	547	344	9,549	6	469
23,115	918	216,202	3,015	22,205	19,156	39,609	11,755	9,470
2,439	872	54,013	18	5,490	2,299	42,376	273	2,001
.....	.....	.....	.....	.....	.....	14,893	.....	.....
194	16	39,487	72	340	87	6,272	.....	.....
2,633	888	93,500	90	5,830	2,386	63,541	273	2,001
94,084	20,894	1,280,749	49,048	46,672	97,326	858,166	24,885	61,662
<b>178,121</b>	<b>57,478</b>	<b>2,874,036</b>	<b>88,936</b>	<b>111,873</b>	<b>190,176</b>	<b>1,804,329</b>	<b>68,058</b>	<b>181,123</b>
.....	.....	524,000	4,400	.....	.....	193,113	.....	26,958
317	262	62,620	461	348	921	32,326	.....	142
700	35	24,067	228	877	135	22,499	294	315
1,017	297	610,687	5,089	1,225	1,056	247,938	294	27,415
94,084	20,894	1,280,749	49,048	46,672	97,326	858,166	24,885	61,662
.....	27	397	.....	.....	7	937	.....	66
94,084	20,921	1,281,146	49,048	46,672	97,333	859,103	24,885	61,728
9,055	3,242	305,250	8,100	13,816	8,000	113,632	15,000	25,042
.....	.....	.....	.....	.....	.....	14,893	.....	.....
73,965	33,018	676,953	26,699	50,160	83,787	568,763	27,879	66,938
.....	.....	.....	.....	.....	.....	.....	.....	.....
83,020	36,260	982,203	34,799	63,976	91,787	697,288	42,879	91,980
<b>178,121</b>	<b>57,478</b>	<b>2,874,036</b>	<b>88,936</b>	<b>111,873</b>	<b>190,176</b>	<b>1,804,329</b>	<b>68,058</b>	<b>181,123</b>
57,969	19,686	706,200	22,544	25,592	56,285	461,265	19,858	52,924
1,023	42	4,004	31	863	3,151	12,528	538	10
<b>58,992</b>	<b>19,728</b>	<b>710,204</b>	<b>22,575</b>	<b>26,455</b>	<b>59,436</b>	<b>473,793</b>	<b>20,396</b>	<b>52,934</b>
39,779	10,999	449,709	14,617	18,571	37,903	287,629	11,053	30,878
.....	.....	.....	.....	.....	.....	.....	.....	.....
3,460	2,548	53,898	1,541	3,875	6,146	37,003	1,522	4,401
6,581	1,715	60,324	1,461	2,694	5,897	45,008	3,147	4,187
.....	36	41,035	445	.....	.....	20,808	.....	3,569
2,567	1,050	42,257	1,023	1,292	2,961	24,624	860	3,218
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>52,387</b>	<b>16,348</b>	<b>647,223</b>	<b>19,087</b>	<b>26,432</b>	<b>52,907</b>	<b>415,072</b>	<b>16,582</b>	<b>46,253</b>
6,605	3,380	62,981	3,488	23	6,529	58,721	3,814	6,681
523	428	5,269	274	530	418	3,263	285	471

## Municipal Electrical Utilities Financial

## Southern Ontario System—Concluded

Municipality.....	Whitby	Warton	Williams- burg	Winchester	Windermere	Windsor
Population.....	10,543	1,953	340	1,348	129	119,319
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	881,174	108,129	21,102	88,687	27,936	11,078,486
Accumulated depreciation.....	139,604	14,251	5,539	18,454	6,267	3,446,669
Net fixed assets.....	741,570	93,878	15,563	70,233	21,669	7,631,817
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	27,870	7,661	1,638	9,384	6,779	1,500
Investment in government securities	10,000	24,000	15,000	.....	5,400	1,973,816
Accounts receivable.....	24,277	1,205	150	143	215	505,122
Total current assets.....	62,147	32,866	16,788	9,527	12,394	2,480,438
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	41,251	1,199	389	1,000	62	479,534
Sinking fund on local debentures...	.....	.....	.....	.....	.....	171,346
Miscellaneous.....	.....	.....	.....	1,000	224	1,115
Total other assets.....	41,251	1,199	389	2,000	286	651,995
Equity in Ontario Hydro Systems.....	293,574	78,043	22,063	81,624	11,358	11,030,570
	<b>1,138,542</b>	<b>205,986</b>	<b>54,803</b>	<b>163,384</b>	<b>45,707</b>	<b>21,794,820</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	76,000	.....	.....	.....	.....	190,000
Accounts payable.....	135,520	176	.....	540	64	274,469
Other.....	15,449	172	368	10	.....	167,355
Total liabilities.....	226,969	348	368	550	64	631,824
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	293,574	78,043	22,063	81,624	11,358	11,030,570
Other.....	.....	23	311	.....	90	252,629
Total reserves.....	293,574	78,066	22,374	81,624	11,448	11,283,199
<b>CAPITAL</b>						
Debentures redeemed.....	100,612	37,400	2,750	29,206	11,238	2,393,832
Local sinking fund.....	.....	.....	.....	.....	.....	171,346
Accumulated net income invested in plant or held as working funds.	517,387	90,172	29,311	52,004	22,957	7,314,619
Frequency standardization expense charged this year.....	.....	.....	.....	.....	.....	.....
Total capital.....	617,999	127,572	32,061	81,210	34,195	9,879,797
	<b>1,138,542</b>	<b>205,986</b>	<b>54,803</b>	<b>163,384</b>	<b>45,707</b>	<b>21,794,820</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	468,155	59,373	9,043	54,401	9,239	4,209,659
Other.....	3,251	808	514	307	238	128,836
Total revenue.....	<b>471,406</b>	<b>60,181</b>	<b>9,557</b>	<b>54,708</b>	<b>9,477</b>	<b>4,338,495</b>
<b>EXPENSE</b>						
Power purchased.....	278,312	44,098	8,413	37,885	4,221	2,684,869
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	28,203	8,513	412	3,396	798	625,941
Administration.....	48,468	6,239	809	3,250	812	465,320
Fixed charges—interest and principal	11,260	.....	.....	1,540	.....	.....
—depreciation.....	20,335	2,599	621	2,385	860	337,345
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>386,578</b>	<b>61,449</b>	<b>10,255</b>	<b>48,456</b>	<b>6,691</b>	<b>4,113,475</b>
Net income or net expense.....	<b>84,828</b>	<b>1,268</b>	<b>698</b>	<b>6,252</b>	<b>2,786</b>	<b>225,020</b>
Number of customers.....	3,529	754	153	533	119	37,057



## Statements for the Year Ended December 31, 1958

Wingham	Woodbridge	Woodstock	Woodville	Wyoming	York Twp.	Zurich	TOTAL SOUTHERN ONTARIO
2,677	2,129	18,852	409	813	119,966	624	
\$ 252,211 77,904	\$ 148,254 31,767	\$ 1,679,296 403,714	\$ 26,079 4,327	\$ 52,087 13,955	\$ 6,421,485 1,722,969	\$ 40,022 5,566	\$ 333,580,068 69,080,840
174,307	116,487	1,275,582	21,752	38,132	4,698,516	34,456	264,499,228
15,080	26,408	8,584	1,717	4,287	364,137	1,534	9,969,306
60,000	24,525	135,000	.....	9,120	554,000	.....	12,377,183
214	1,518	16,302	248	2,481	223,387	143	13,413,472
75,294	52,451	159,886	1,965	15,888	1,141,524	1,677	35,759,961
17,280	28	41,122	.....	451	168,564	325	16,364,190
1,260	.....	7,405	100	471	2,316	.....	1,033,436
.....	.....	.....	.....	.....	.....	.....	2,189,409
18,540	28	48,527	100	922	170,880	325	19,587,035
162,054	151,384	1,492,371	30,076	31,942	3,435,586	44,686	207,130,246
<b>430,195</b>	<b>320,350</b>	<b>2,976,366</b>	<b>53,893</b>	<b>86,884</b>	<b>9,446,506</b>	<b>81,144</b>	<b>526,976,470</b>
.....	13,500	113,563	.....	.....	.....	.....	67,094,210
.....	1,784	8,632	3,013	439	287,795	568	9,639,515
3,208	3,137	17,269	30	63	397,508	.....	5,768,380
3,208	18,421	139,464	3,043	502	685,303	568	82,502,105
162,054	151,384	1,492,371	30,076	31,942	3,435,586	44,686	207,130,246
91	453	9,829	478	64	55,609	.....	3,372,044
162,145	151,837	1,502,200	30,554	32,006	3,491,195	44,686	210,502,290
81,155	10,000	313,822	5,248	9,700	489,375	5,592	72,221,724
.....	.....	.....	.....	.....	.....	.....	1,033,436
183,687	140,092	1,050,849	15,048	44,676	4,780,633	30,298	161,262,948
.....	.....	29,969	.....	.....	.....	.....	546,033
264,842	150,092	1,334,702	20,296	54,376	5,270,008	35,890	233,972,075
<b>430,195</b>	<b>320,350</b>	<b>2,976,366</b>	<b>53,893</b>	<b>86,884</b>	<b>9,446,506</b>	<b>81,144</b>	<b>526,976,470</b>
110,296	111,454	904,340	13,141	25,241	3,044,134	22,265	152,873,787
3,715	699	4,340	15	182	37,133	3	1,622,716
<b>114,011</b>	<b>112,153</b>	<b>908,680</b>	<b>13,156</b>	<b>25,423</b>	<b>3,081,267</b>	<b>22,268</b>	<b>154,496,503</b>
71,823	75,094	569,373	8,338	13,747	2,015,315	13,914	93,902,960
2,814	.....	.....	.....	.....	.....	.....	488,389
7,924	3,356	81,354	1,173	1,743	289,934	3,086	14,727,996
11,702	5,824	48,654	966	1,123	294,629	2,120	12,942,207
.....	1,116	36,764	.....	.....	.....	.....	5,902,886
7,876	4,044	48,356	653	1,521	192,692	989	8,848,653
.....	.....	.....	.....	.....	.....	.....	9,060
<b>102,139</b>	<b>89,434</b>	<b>784,501</b>	<b>11,130</b>	<b>18,134</b>	<b>2,792,570</b>	<b>20,109</b>	<b>136,822,151</b>
<b>11,872</b>	<b>22,719</b>	<b>124,179</b>	<b>2,026</b>	<b>7,289</b>	<b>288,697</b>	<b>2,159</b>	<b>17,674,352</b>
1,019	748	6,429	187	318	38,872	287	1,188,544

Municipal Electrical Utilities Financial

Northern Ontario Properties

Municipality.....	Atikokan Twp. 6,430	Cache Bay 896	Capreol 2,474	Chapleau Twp. 3,714	Cochrane 4,396	Coniston 2,549
Population.....						
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	451,354	50,496	153,737	116,779	343,130	84,751
Accumulated depreciation.....	50,197	7,636	23,768	4,680	57,448	7,311
Net fixed assets.....	401,157	42,860	129,969	112,099	285,682	77,440
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	70,501	6,381	5,387	100	42,303	14,841
Investment in government securities	50,000	7,923				
Accounts receivable.....	5,176	1,376	909	3,851	3,578	7,953
Total current assets.....	125,677	15,680	6,296	3,951	45,881	22,794
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation....	10,974	257	646	2,440	27,036	1,524
Sinking fund on local debentures....						
Miscellaneous.....	763	93	188	4,705	846	174
Total other assets.....	11,737	350	834	7,145	27,882	1,698
Equity in Ontario Hydro Systems....	20,792					
	559,363	58,890	137,099	123,195	359,445	101,932
<b>LIABILITIES</b>						
Debentures outstanding.....	375,000	12,000	37,500	103,000	107,500	47,000
Accounts payable.....	9,379		1,917	199	8,505	6,930
Other.....	37,331	610	1,020	1,789	11,017	7,357
Total liabilities.....	421,710	12,610	40,437	104,988	127,022	61,287
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	20,792					
Other.....		76	390		555	152
Total reserves.....	20,792	76	390		555	152
<b>CAPITAL</b>						
Debentures redeemed.....	25,000	16,000	31,500	12,000	37,500	3,000
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds....	91,861	30,204	64,772	6,207	194,368	37,493
Frequency standardization expense charged this year.....						
Total capital.....	116,861	46,204	96,272	18,207	231,868	40,493
	559,363	58,890	137,099	123,195	359,445	101,932
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	230,737	22,195	91,921	127,487	165,843	47,367
Other.....	4,109	432	931		652	9
Total revenue.....	234,846	22,627	92,852	127,487	166,495	47,376
<b>EXPENSE</b>						
Power purchased.....	127,238	13,136	57,929	86,721	80,074	28,308
Local generation.....						
Operation and maintenance.....	16,847	825	7,225	7,857	24,041	2,985
Administration.....	32,468	1,686	11,330	8,250	20,520	4,466
Fixed charges—interest and principal	31,225	2,563	3,876	10,242	12,987	3,812
—depreciation.....	10,092	1,162	3,814	2,413	8,502	1,903
—other.....						
Total expense.....	217,870	19,372	84,174	115,483	146,124	41,474
Net income or net expense.....	16,976	3,255	8,678	12,004	20,371	5,902
Number of customers.....	1,843	201	904	957	1,251	638

## Statements for the Year Ended December 31, 1958

Dryden 4,993	Fort William 41,791	Hearst 2,326	Kapuskas- ing 5,911	Larder Lake Twp. 1,993	Latchford 440	Massey 1,176	McGarry 3,007	Nipigon Twp. 2,682
\$ 355,404 80,543	\$ 3,283,033 653,997	\$ 217,638 30,148	\$ 328,099 13,578	\$ 61,729 19,349	\$ 25,818 4,618	\$ 70,827 2,931	\$ 68,056 12,746	\$ 133,862 22,840
274,861	2,629,036	187,490	314,521	42,380	21,200	67,896	55,310	111,022
33,137	1,250	26,993	8,941	10,870	9,499	7,245	1,387	10,850
12,275	270,800	40,000	832	1,023	796	1,747	438	20,000
45,412	389,265	67,825	11,680	11,893	10,295	8,992	1,825	32,645
10,563	231,257	3,145	19,981	116	68	1,835	99	10,506
	5,000	1,692	627				464	
10,563	236,257	4,837	20,608	116	68	1,835	563	10,506
36,702	3,940,915							71,553
<b>367,538</b>	<b>7,195,473</b>	<b>260,152</b>	<b>346,809</b>	<b>54,389</b>	<b>31,563</b>	<b>78,723</b>	<b>57,698</b>	<b>225,726</b>
77,905	299,000	71,100	46,017	8,500		39,600	7,000	
	186,809	920	3,681	4,659	694	188	13	
16,581	72,510	8,854	9,247	6,028	385	1,198	6,047	2,493
94,486	558,319	80,874	58,945	19,187	1,079	40,986	13,060	2,493
36,702	3,940,915							71,553
455	3,561	314	337	160	39			
37,157	3,944,476	314	337	160	39			71,553
48,525	515,209	68,900	44,462	9,500	18,901	5,400	7,000	10,000
187,370	2,177,469	110,064	243,065	25,542	11,544	32,337	37,638	141,680
235,895	2,692,678	178,964	287,527	35,042	30,445	37,737	44,638	151,680
<b>367,538</b>	<b>7,195,473</b>	<b>260,152</b>	<b>346,809</b>	<b>54,389</b>	<b>31,563</b>	<b>78,723</b>	<b>57,698</b>	<b>225,726</b>
202,039	1,574,299	103,867	191,888	45,019	9,711	37,848	53,049	77,964
1,463	19,065	1,400	1,991			95		1,688
<b>203,502</b>	<b>1,593,364</b>	<b>105,267</b>	<b>193,879</b>	<b>45,019</b>	<b>9,711</b>	<b>37,943</b>	<b>53,049</b>	<b>79,652</b>
80,468	996,045	58,530	125,074	31,969	4,637	12,023	37,716	42,252
27,349	153,954	6,058	13,393	3,319	696	8,485	3,214	9,547
16,733	104,891	8,156	23,632	4,556	1,070	4,779	6,910	8,471
9,576	31,165	9,481	8,032	1,569	1	3,966	1,322	
9,201	82,317	4,033	6,724	1,885	665	1,341	1,778	3,385
<b>143,327</b>	<b>1,368,372</b>	<b>86,258</b>	<b>176,855</b>	<b>43,298</b>	<b>7,069</b>	<b>30,594</b>	<b>50,940</b>	<b>63,655</b>
<b>60,175</b>	<b>224,992</b>	<b>19,009</b>	<b>17,024</b>	<b>1,721</b>	<b>2,642</b>	<b>7,349</b>	<b>2,109</b>	<b>15,997</b>
1,583	13,092	632	1,904	585	156	358	499	711



# Municipal Electrical Utilities Financial

## Northern Ontario Properties—Concluded

Municipality.....	North Bay	Port Arthur	Rainy River	Red Rock	Schreiber Twp. 2,042	Sioux Lookout 2,311
Population.....	22,552	40,250	1,290	1,885		
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	1,389,378	4,099,916	191,518	93,345	118,311	189,912
Accumulated depreciation.....	320,481	1,553,371	36,084	14,767	16,953	19,862
Net fixed assets.....	1,068,897	2,546,545	155,434	78,578	101,358	170,050
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	43,926	187,322	3,358	13,274	16,467	25
Investment in government securities.....		433,000			15,000	5,000
Accounts receivable.....	24,618	185,178	11,044	708	1,081	4,421
Total current assets.....	68,544	805,500	14,402	13,982	32,548	9,446
<b>OTHER ASSETS</b>						
Inventory of stores, tools and equip- ment at cost less depreciation..	69,944	249,854	3,342	402	7,096	12,894
Sinking fund on local debentures.....						
Miscellaneous.....	5,481	1,300		1,738		109
Total other assets.....	75,425	251,154	3,342	2,140	7,096	13,003
Equity in Ontario Hydro Systems.....		7,424,819		25,582	31,142	
	<b>1,212,866</b>	<b>11,028,018</b>	<b>173,178</b>	<b>120,282</b>	<b>172,144</b>	<b>192,499</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	381,000		16,000	16,510	1,500	
Accounts payable.....	1,192	175,736	121	2,638	208	9,634
Other.....	81,293		220	70		5,547
Total liabilities.....	463,485	175,736	16,341	19,218	1,708	15,181
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..		7,424,819		25,582	31,142	
Other.....	2,167	109,325	870			
Total reserves.....	2,167	7,534,144	870	25,582	31,142	
<b>CAPITAL</b>						
Debentures redeemed.....	279,158	626,317	128,526	14,690	48,500	
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.	468,056	2,691,821	27,441	60,792	90,794	177,318
Frequency standardization expense charged this year.....						
Total capital.....	747,214	3,318,138	155,967	75,482	139,294	177,318
	<b>1,212,866</b>	<b>11,028,018</b>	<b>173,178</b>	<b>120,282</b>	<b>172,144</b>	<b>192,499</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	821,370	1,630,955	22,741	41,223	51,225	114,570
Other.....	884	43,598	450	326	1,159	2,057
Total revenue.....	<b>822,254</b>	<b>1,674,553</b>	<b>23,191</b>	<b>41,549</b>	<b>52,384</b>	<b>116,627</b>
<b>EXPENSE</b>						
Power purchased.....	498,170	1,098,242	11,101	21,471	25,374	73,446
Local generation.....		20,851				
Operation and maintenance.....	72,065	138,606	4,032	2,410	5,077	10,373
Administration.....	99,982	102,735	2,662	3,021	7,631	13,718
Fixed charges—interest and principal	28,936		1,896	2,306	1,624	729
—depreciation.....	38,298	74,781	1,141	2,311	2,865	4,393
—other.....		4,000				
Total expense.....	<b>737,451</b>	<b>1,439,215</b>	<b>20,832</b>	<b>31,519</b>	<b>42,571</b>	<b>102,659</b>
Net income or net expense.....	<b>84,803</b>	<b>235,338</b>	<b>2,359</b>	<b>10,030</b>	<b>9,813</b>	<b>13,968</b>
Number of customers.....	6,983	12,818	451	329	617	927

Statements for the Year Ended December 31, 1958

Sturgeon Falls 6,213	Sudbury 47,773	Terrace Bay 1,820	Thessalon 1,742	Webbwood 540	West Ferris Twp. 4,307	TOTAL NORTHERN ONTARIO PROPERTIES	TOTAL ALL SYSTEMS
\$ 252,208 39,728	\$ 3,436,861 518,320	\$ 152,105 29,306	\$ 86,640 20,729	\$ 37,791 899	\$ 333,395 30,736	\$ 16,126,093 3,593,026	\$ 349,706,161 72,673,866
212,480	2,918,541	122,799	65,911	36,892	302,659	12,533,067	277,032,295
33,394	199,986	29,543	22,208	543	.....	799,731	10,769,037
.....	50,000	65,000	.....	.....	.....	956,723	13,333,906
9,731	90,400	329	3,020	442	5,120	497,795	13,911,267
43,125	340,386	94,872	25,228	985	5,120	2,254,249	38,014,210
12,698	161,261	5,643	2,119	616	27,147	873,463	17,237,653
.....	.....	.....	.....	.....	.....	.....	1,033,436
35	1,643	.....	125	.....	.....	24,983	2,214,392
12,733	162,904	5,643	2,244	616	27,147	898,446	20,485,481
.....	.....	54,690	.....	.....	.....	11,606,195	218,736,441
<b>268,338</b>	<b>3,421,831</b>	<b>278,004</b>	<b>93,383</b>	<b>38,493</b>	<b>334,926</b>	<b>27,291,957</b>	<b>554,268,427</b>
87,000	252,218	46,800	59,000	26,432	152,000	2,269,582	69,363,792
10,204	8,706	.....	1,460	631	31,526	465,950	10,105,465
9,539	109,431	.....	1,697	176	16,380	406,820	6,175,200
106,743	370,355	46,800	62,157	27,239	199,906	3,142,352	85,644,457
.....	.....	54,690	.....	.....	.....	11,606,195	218,736,441
526	15,800	.....	64	.....	540	135,331	3,507,375
526	15,800	54,690	64	.....	540	11,741,526	222,243,816
13,000	765,120	31,200	6,000	3,568	30,500	2,799,476	75,021,200
.....	.....	.....	.....	.....	.....	.....	1,033,436
148,069	2,270,556	145,314	25,162	7,686	103,980	9,608,603	170,871,551
.....	.....	.....	.....	.....	.....	.....	546,033
161,069	3,035,676	176,514	31,162	11,254	134,480	12,408,079	246,380,154
<b>268,338</b>	<b>3,421,831</b>	<b>278,004</b>	<b>93,383</b>	<b>38,493</b>	<b>334,926</b>	<b>27,291,957</b>	<b>554,268,427</b>
127,603	1,732,529	56,423	51,769	16,213	179,117	7,826,972	160,700,759
1,156	13,552	3,970	457	.....	1,826	101,270	1,723,986
<b>128,759</b>	<b>1,746,081</b>	<b>60,393</b>	<b>52,226</b>	<b>16,213</b>	<b>180,943</b>	<b>7,928,242</b>	<b>162,424,745</b>
77,608	923,050	28,020	24,849	5,067	91,973	4,660,491	98,563,451
.....	.....	.....	.....	.....	.....	20,851	509,240
17,966	254,064	2,195	3,492	3,519	16,470	816,064	15,544,060
19,889	166,017	5,100	9,992	3,066	20,448	712,179	13,654,386
8,670	69,554	5,752	4,768	2,617	16,218	272,887	6,175,773
6,256	84,287	3,987	2,339	727	7,341	367,941	9,216,594
.....	.....	.....	.....	.....	.....	4,000	13,060
<b>130,389</b>	<b>1,496,972</b>	<b>45,054</b>	<b>45,440</b>	<b>14,996</b>	<b>152,450</b>	<b>6,854,413</b>	<b>143,676,564</b>
<b>1,630</b>	<b>249,109</b>	<b>15,339</b>	<b>6,786</b>	<b>1,217</b>	<b>28,493</b>	<b>1,073,829</b>	<b>18,748,181</b>
1,541	15,594	412	511	140	1,624	67,261	1,255,805

## INTRODUCTION TO STATEMENT "C" AND STATEMENT "D"

### STATEMENT "C"

Statement "C" is the schedule of resale rates for domestic, commercial, and power service in the municipal distribution systems receiving power from the Commission. From time to time as revision becomes necessary these rates are adjusted to the new rate structures introduced in 1956.

#### Description of Classes of Service

Domestic rates are applicable to all electrical service for household purposes, with the exception of house heating and flat-rate water-heaters. The account for normal domestic service consists of specified blocks of kilowatt-hours per month with suitable rates for each block. The account is subject to a minimum monthly charge and to a prompt payment discount of 10 per cent. For comparative purposes, net monthly bills are shown for metered energy consumptions of 100, 300, and 500 kilowatt-hours per month.

The water-heater rates shown in Statement "C" are for unmetered flat-rate service which is billed at a monthly rate per 100 watts of heater capacity. In many municipalities the flat-rate water-heater load is subject to peak-load control by the utility. The customer, of course, has the option of paying for water heating at regular rates through the regular metered service. House-heating rates quoted are for separately metered consumption where an area greater than 25 per cent of the total is heated by electricity.

Commercial rates are applicable to all electrical service supplied to stores, offices, churches, schools, public buildings, institutions, hospitals, hotels, restaurants, service stations, and other premises used for commercial purposes. The commercial rates are also used for billing sign and display lighting. In most municipalities on the new rate structures, commercial-type customers having connected loads of less than five kilowatts are billed at domestic rates. Otherwise commercial accounts consist of a monthly demand rate (with a minimum) applied to the customer's billing demand, plus energy rates for specified blocks of kilowatt-hours used, the size of the blocks varying in accordance with the customer's billing demand. The energy rates, depending on whether the old or new rate structures are in effect, are applied to either one or two blocks of kilowatt-hours based on 100 hours' monthly use of the billing demand, all remaining monthly kilowatt-hours being billed at a final energy rate. The account is subject to a minimum monthly charge and to a prompt payment discount of 10 per cent. The net monthly bills shown are calculated on the basis of a demand of one kilowatt for a use per month of 100, 200, and 300 hours. The corresponding bill for a demand of ten kilowatts for the same number of hours' use would be ten times the amounts shown, and for  $x$  kilowatts would be  $x$  times the amounts shown.

The rates for power service to customers of the municipal utilities and local systems provide for 24-hour unrestricted delivery at secondary distribution voltage. These rates, however, are not applicable to certain industrial customers who are served directly by the Commission.



The power service account, like the commercial service account, consists of a monthly demand rate applied to the customer's billing demand, plus energy rates for specified blocks of kilowatt-hours used, the size of the blocks varying in accordance with the customer's billing demand. The energy rates, depending on whether the old or new rate structures are in effect, are applied either to 50 hours' monthly use of the customer's billing demand at each of the first and second rates or to 100 hours' monthly use at each of these two rates. All remaining monthly kilowatt-hours are billed at a third energy rate. The account is subject to a prompt payment discount of 10 per cent. Customers providing their own step-down transformation are granted, on the basis of their billing demand, an allowance of 27¢ per kilowatt per month gross for service at subtransmission voltage and 17¢ per kilowatt per month gross for service at primary distribution voltage. The net monthly bills shown are calculated on the same basis as for commercial service.

#### **STATEMENT "D"**

Statement "D" records revenue, consumption, number of customers, average consumption per customer, and average cost per kilowatt-hour for each of the three main classes of service in all the municipal systems served. The revenue and consumption from house heating and the use of flat-rate water-heaters are included in the totals shown, the flat-rate kilowatt-hours being estimated.

With the introduction of the new rate structures there may be a shift during the year of a substantial group of customers with small connected loads from commercial service rates to domestic service rates. For statistical purposes they will thereafter be included in the domestic service group. If such a shift during the year under review materially distorts the calculated averages of consumption and cost per customer, these averages are omitted.

The average cost per kilowatt-hour shown is the average cost to the customer, that is the average revenue per kilowatt-hour received by the utility. Such a statistical average does not represent the utility's actual cost of delivering one kilowatt-hour. However, a comparison of this average over a number of years is some indication of the trend of cost in any one municipality, and the trend in all municipal systems combined may be seen in the table on page 196 and the graphs on page 197. Other things being equal, the average cost per kilowatt-hour would rise with an increase in rates. Consumption per customer, however, is continuously increasing and domestic customers, in particular, are using an ever-increasing variety of electric appliances, including flat-rate water-heaters. Such increased use, since it is billed at the low rates applicable to higher-consumption blocks of kilowatt-hours, is frequently reflected in a lower average cost per kilowatt-hour.

For power service customers, the relationship between demand (kilowatts required) and energy (kilowatt-hours of use) is an important factor in establishing the individual's average cost per kilowatt-hour. The use of the demand for only a few hours will result in a relatively small total bill but a high average cost per kilowatt-hour; the use of the same demand for several hours will increase the total bill but substantially reduce the average cost per kilowatt-hour. In other words, the average cost per kilowatt-hour varies inversely with the customer's load factor.

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Acton.....	45	1.67	60	3.2	..	..	1.3	2.20	4.54	6.88
Ailsa Craig.....	51	..	60	3.2	..	..	1.2	2.16	4.32	6.48
Ajax.....	39	..	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Alexandria.....	38	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Alfred.....	45	..	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Alliston.....	43	1.67	60	3.1	..	..	1.0	2.03	3.83	5.63
Almonte.....	35	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Alvinston.....	54	..	60	3.5	..	..	1.0	2.25	4.05	5.85
Amherstburg.....	38	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Ancaster Twp. (including Ancaster).....	43	..	60	4.2	..	..	1.2	2.70	4.86	7.02
Apple Hill.....	56	..	60	4.0	..	..	1.0	2.52	4.32	6.12
Arkona.....	43	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Arnprior.....	38	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Arthur.....	43	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Athens.....	40	..	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Atikokan Twp.....	40	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Aurora.....	42	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Aylmer.....	45	..	60	2.5	..	..	1.0	1.71	3.51	5.31
Ayr.....	44	..	60	2.9	..	..	1.0	1.93	3.73	5.53
Baden.....	42	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
†Bala.....	39	..	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Bancroft.....	53	..	60	3.5	..	..	1.3	2.36	4.70	7.04
Barrie.....	40	1.67	60	2.4	..	..	1.0	1.66	3.46	5.26
Barry's Bay.....	47	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Bath.....	40	..	60	3.5	..	..	1.2	2.32	4.48	6.64
Beachville.....	46	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Beamsville.....	43	..	60	2.7	..	..	1.2	1.89	4.05	6.21
†Beardmore.....	43	..	60	4.4	..	..	1.5	2.92	5.62	8.32
Beaverton.....	45	..	60	2.8	..	..	1.2	1.94	4.10	6.26
Beeton.....	50	1.67	60	3.8	..	..	1.2	2.48	4.64	6.80
Belle River.....	45	..	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Belleville.....	35	..	60	1.8	..	..	0.8	1.26	2.70	4.14
Blenheim.....	48	..	60	2.9	..	..	1.2	2.00	4.16	6.32
†Blind River.....	49	..	50	3.8	1.9	1.1	1.5	2.56	5.62	7.60
Bloomfield.....	42	1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Blyth.....	47	..	60	2.9	..	..	1.1	1.96	3.94	5.92
Bobcaygeon.....	40	..	60	3.4	..	..	1.2	2.27	4.43	6.59
Bolton.....	46	..	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Bothwell.....	52	..	60	2.6	..	..	1.0	1.76	3.56	5.36
Bowmanville.....	38	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81

†Local system  
For explanatory notes and water-heating schedules see pages 272 to 275.

# Utilities and Local Systems

## FOR ELECTRICAL SERVICE

### December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	\$	\$	\$	
2.7	..	1.2	2.88	3.96	5.04	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
2.7	..	1.0	2.88	3.78	4.68	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
2.6	..	1.0	2.79	3.69	4.59	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
1.9	0.8	0.5	2.16	2.88	3.33	1.00	..	1.1	..	0.5	0.33	1.89	2.34	2.64
3.0	..	0.9	3.15	3.96	4.77	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	2.2	..	0.5	0.33	2.88	3.33	3.63
3.6	..	1.0	3.69	4.59	5.49	1.35	2.9	..	1.9	..	0.33	3.37	3.67	3.97
3.5	..	1.0	3.60	4.50	5.40	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.4	..	0.5	0.33	3.06	3.51	3.81
1.9	0.8	0.5	2.16	2.88	3.33	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
1.5	0.8	0.5	1.80	2.52	2.97	1.00	..	1.0	..	0.5	0.33	1.80	2.25	2.55
3.0	0.8	0.5	3.15	3.87	4.32	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
1.9	0.8	0.5	2.16	2.88	3.33	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
2.0	..	0.7	2.25	2.88	3.51	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.4	..	0.9	2.61	3.42	4.23	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
4.2	0.8	0.5	4.23	4.95	5.40	1.00	..	2.7	..	0.5	0.33	3.33	3.78	4.08
3.0	..	1.2	3.15	4.23	5.31	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.0	..	0.8	2.25	2.97	3.69	1.00	1.4	..	0.9	..	0.25	1.93	2.16	2.38
2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
3.0	..	1.2	3.15	4.23	5.31	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
2.3	..	1.1	2.52	3.51	4.50	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
3.9	..	1.5	3.96	5.31	6.66	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.2	..	1.0	2.43	3.33	4.23	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
3.4	..	1.2	3.51	4.59	5.67	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
3.0	0.8	0.5	3.15	3.87	4.32	1.00	..	2.2	..	0.5	0.33	2.88	3.33	3.63
1.6	..	0.6	1.89	2.43	2.97	1.00	1.3	..	0.8	..	0.25	1.84	2.07	2.29
2.4	..	1.1	2.61	3.60	4.59	1.35	2.6	..	1.7	..	0.33	3.15	3.45	3.74
3.6	0.8	0.5	3.69	4.41	4.86	1.00	..	2.7	..	0.5	0.33	3.33	3.78	4.08
1.8	0.8	0.5	2.07	2.79	3.24	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82
2.4	..	1.1	2.61	3.60	4.59	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10
2.9	..	1.0	3.06	3.96	4.86	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
3.0	0.8	0.5	3.15	3.87	4.32	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
2.1	..	0.7	2.34	2.97	3.60	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
1.7	0.8	0.5	1.98	2.70	3.15	1.00	..	1.2	..	0.5	0.33	1.98	2.43	2.73



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Bracebridge.....	40	..	60	3.0	..	..	1.2	2.05	4.21	6.37
Bradford.....	40	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Braeside.....	49	..	50	4.0	..	..	1.3	2.38	4.72	7.06
Brampton.....	37	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Brantford.....	44	1.67	60	2.2	..	..	1.2	1.62	3.78	5.94
§§Brantford Twp.....	42	2.0	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Brechin.....	45	..	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Bridgeport.....	42	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Brigden.....	53	..	60	3.0	..	..	0.9	1.94	3.56	5.18
Brighton.....	39	..	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Brockville.....	38	..	60	2.0	..	..	1.0	1.44	3.24	5.04
•Bronte.....	43	..	60	3.0	..	..	1.5	2.16	4.86	7.56
Brussels.....	49	..	60	3.2	..	..	1.0	2.09	3.89	5.69
Burford.....	43	..	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Burgessville.....	52	..	60	4.0	..	..	1.0	2.52	4.32	6.12
Burk's Falls.....	45	2.0	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
§Burlington.....	42	..	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Cache Bay.....	45	..	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Caledonia.....	43	..	60	2.4	..	..	1.2	1.73	3.89	6.05
Campbellville.....	50	..	60	3.0	..	..	1.3	2.09	4.43	6.77
Cannington.....	48	..	60	3.2	..	..	1.0	2.09	3.89	5.69
Capreol.....	43	..	60	3.5	..	..	1.3	2.36	4.70	7.04
Cardinal.....	40	..	55	2.8	..	..	1.1	1.83	3.81	5.79
Carleton Place.....	40	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Casselman.....	42	..	50	4.2	2.1	1.2	1.6	2.83	6.21	8.37
Cayuga.....	42	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Chalk River.....	40	..	50	4.2	2.1	1.2	1.6	2.83	6.21	8.37
Chapleau Twp.....	..	..	60	9.0	..	..	4.0	6.30	13.50	20.70
Chatham.....	48	1.67	60	3.8	..	..	1.4	2.56	5.08	7.60
Chatsworth.....	46	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Chesley.....	41	1.67	60	2.7	..	..	1.0	1.82	3.62	5.42
Chesterville.....	44	..	60	2.7	..	..	1.1	1.85	3.83	5.81
Chippawa.....	40	..	60	3.1	..	..	1.4	2.18	4.70	7.22
Clifford.....	45	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Clinton.....	46	..	60	3.1	..	..	1.2	2.11	4.27	6.43
†Cobalt.....	42	..	60	4.2	..	..	1.5	2.81	5.51	8.21
Cobden.....	36	..	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Cobourg.....	44	..	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Cochrane.....	35	..	60	3.4	..	..	1.5	2.38	5.08	7.78
Colborne.....	43	..	60	3.8	..	..	1.0	2.41	4.21	6.01

†Local system  
•Annexed to Trafalgar Twp. effective January 1959.  
For explanatory notes and water-heating schedules see pages 272 to 275.

# Utilities and Local Systems FOR ELECTRICAL SERVICE December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
2.0	..	1.0	2.25	3.15	4.05	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
¶2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
4.0	..	1.0	4.05	4.95	5.85	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
¶2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
1.8	..	0.7	2.07	2.70	3.33	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
¶2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.2	..	0.5	0.33	2.88	3.33	3.63
¶2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
¶2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
2.5	..	0.7	2.70	3.33	3.96	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
¶2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
1.7	..	0.8	1.98	2.70	3.42	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
2.5	..	1.5	2.70	4.05	5.40	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
2.7	..	0.8	2.88	3.60	4.32	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
¶2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
3.5	..	0.8	3.60	4.32	5.04	1.35	2.9	..	1.9	..	0.33	3.37	3.67	3.97
¶2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	2.3	..	0.5	0.33	2.97	3.42	3.72
¶2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.2	..	0.5	0.33	2.88	3.33	3.63
¶3.5	0.8	0.5	3.60	4.32	4.77	1.00	..	3.0	..	0.5	0.33	3.60	4.05	4.35
1.9	..	1.1	2.16	3.15	4.14	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
2.8	..	1.1	2.97	3.96	4.95	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
2.8	..	0.9	2.97	3.78	4.59	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
3.0	..	1.1	3.15	4.14	5.13	1.35	2.9	..	1.9	..	0.33	3.37	3.67	3.97
2.3	..	1.0	2.52	3.42	4.32	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
¶2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
¶3.4	0.8	0.5	3.51	4.23	4.68	1.00	..	2.2	..	0.5	0.33	2.88	3.33	3.63
¶2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
¶3.3	0.8	0.5	3.42	4.14	4.59	1.00	..	2.5	..	0.5	0.33	3.15	3.60	3.90
8.5	..	4.0	8.10	11.70	15.30	1.35	5.7	..	3.8	..	2.00	5.49	7.29	9.09
3.3	..	1.2	3.42	4.50	5.58	1.35	2.0	..	1.3	..	0.40	2.70	3.00	3.29
¶2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
2.3	..	1.0	2.52	3.42	4.32	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.2	..	1.1	2.43	3.42	4.41	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
2.6	..	1.3	2.79	3.96	5.13	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
¶3.1	0.8	0.5	3.24	3.96	4.41	1.00	..	2.6	..	0.5	0.33	3.24	3.69	3.99
2.6	..	1.2	2.79	3.87	4.95	1.35	2.6	..	1.7	..	0.33	3.15	3.45	3.74
3.7	..	1.5	3.78	5.13	6.48	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
¶1.9	0.8	0.5	2.16	2.88	3.33	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82
¶2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
2.9	..	1.4	3.06	4.32	5.58	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
3.0	..	1.0	3.15	4.05	4.95	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Coldwater.....	45	..	60	3.2	..	..	1.0	2.09	3.89	5.69
Collingwood.....	43	1.67	60	2.5	..	..	1.1	1.75	3.73	5.71
Comber.....	52	..	60	3.3	..	..	1.2	2.21	4.37	6.53
Coniston.....	43	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Cookstown.....	51	..	45	4.3	..	..	1.0	2.24	4.04	5.84
Cottam.....	41	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Courtright.....	43	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Creemore.....	53	1.67	50	3.1	..	..	1.0	1.84	3.64	5.44
Dashwood.....	45	..	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Deep River.....	35	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Delaware.....	46	..	60	3.8	..	..	1.4	2.56	5.08	7.60
Delhi.....	43	..	60	3.2	..	..	1.0	2.09	3.89	5.69
Deseronto.....	40	..	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Dorchester.....	43	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Drayton.....	59	..	55	4.0	..	..	1.3	2.51	4.85	7.19
Dresden.....	44	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Drumbo.....	41	..	60	3.5	..	..	1.0	2.25	4.05	5.85
Dryden.....	49	..	60	4.5	..	..	1.5	2.97	5.67	8.37
Dublin.....	55	..	60	3.5	..	..	1.1	2.29	4.27	6.25
Dundalk.....	44	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Dundas.....	40	..	60	2.8	..	..	1.1	1.91	3.89	5.87
Dunnville.....	49	..	60	2.6	..	..	1.5	1.94	4.64	7.34
Durham.....	42	1.67	60	2.7	..	..	1.1	1.85	3.83	5.81
Dutton.....	47	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
East York Twp.....	42	..	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Eganville.....	42	..	60	4.3	..	..	1.1	2.72	4.70	6.68
†Elk Lake Townsite.....	42	..	..	Spec.	..	..	..	2.30	4.60	6.60
Elmira.....	45	..	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Elmvale.....	40	..	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Elmwood.....	39	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Elora.....	44	..	60	3.2	..	..	1.4	2.23	4.75	7.27
Embro.....	44	..	60	3.3	..	..	1.1	2.18	4.16	6.14
†Englehart.....	50	..	60	4.5	..	..	1.5	2.97	5.67	8.37
Erieau.....	51	..	60	3.7	..	..	1.0	2.36	4.16	5.96
Erie Beach.....	61	..	60	5.3	..	..	1.5	3.40	6.10	8.80
Erin.....	40	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Essex.....	51	..	60	2.9	..	..	1.2	2.00	4.16	6.32
Etobicoke Twp. (including Thistle town).....	37	..	60	2.7	..	..	1.3	1.93	4.27	6.61
Exeter.....	47	..	60	3.0	..	..	1.3	2.09	4.43	6.77
Fergus.....	45	..	60	3.3	..	..	1.3	2.25	4.59	6.93

†Local system  
For explanatory notes and water-heating schedules see pages 272 to 275.



Utilities and Local Systems  
FOR ELECTRICAL SERVICE  
December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE									
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand			
Energy rate per kwh for use of each kw of demand															
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours	
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$	
2.5	..	1.0	2.70	3.60	4.50	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65	
2.0	..	1.1	2.25	3.24	4.23	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79	
2.8	..	1.1	2.97	3.96	4.95	1.35	2.9	..	1.9	..	0.33	3.37	3.67	3.97	
2.7	0.8	0.5	2.88	3.60	4.05	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45	
3.8	..	1.0	3.87	4.77	5.67	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29	
2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	2.3	..	0.5	0.33	2.97	3.42	3.72	
2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09	
2.6	..	0.9	2.79	3.60	4.41	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79	
3.1	0.8	0.5	3.24	3.96	4.41	1.00	..	2.4	..	0.5	0.33	3.06	3.51	3.81	
2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82	
3.4	..	1.4	3.51	4.77	6.03	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10	
2.6	..	0.8	2.79	3.51	4.23	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29	
2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09	
2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54	
3.4	..	0.7	3.51	4.14	4.77	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88	
2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	2.3	..	0.5	0.33	2.97	3.42	3.72	
3.0	..	0.8	3.15	3.87	4.59	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29	
3.8	..	2.0	3.87	5.67	7.47	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88	
3.0	..	0.8	3.15	3.87	4.59	1.35	3.4	..	2.2	..	0.33	3.73	4.03	4.33	
2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36	
2.3	..	1.0	2.52	3.42	4.32	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79	
2.2	..	1.5	2.43	3.78	5.13	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52	
2.4	..	1.0	2.61	3.51	4.41	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43	
2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45	
2.0	0.8	0.5	2.25	2.97	3.42	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82	
3.8	..	1.0	3.87	4.77	5.67	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65	
Spec.	..	..	3.50	4.50	5.50	..	Spec.	..	..	..	..	3.50	4.50	5.50	
2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36	
2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09	
2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27	
2.8	..	1.4	2.97	4.23	5.49	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29	
2.7	..	0.7	2.88	3.51	4.14	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10	
4.0	..	1.5	4.05	5.40	6.75	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10	
3.5	..	0.9	3.60	4.41	5.22	1.35	4.0	..	2.6	..	0.33	4.18	4.48	4.78	
4.8	..	1.0	4.77	5.67	6.57	1.35	4.1	..	2.7	..	0.33	4.27	4.57	4.87	
2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18	
2.4	..	1.0	2.61	3.51	4.41	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29	
2.2	..	0.8	2.43	3.15	3.87	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79	
2.6	..	0.8	2.79	3.51	4.23	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19	
2.8	..	1.1	2.97	3.96	4.95	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43	

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Finch .....	42	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Flesherton.....	37	1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Fonthill.....	41	..	60	3.0	..	..	1.3	2.09	4.43	6.77
Forest.....	46	..	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Forest Hill.....	40	..	60	2.5	..	..	1.4	1.85	4.37	6.89
Fort William.....	34	1.67	60	2.0	..	..	0.8	1.37	2.81	4.25
Frankford.....	34	..	60	3.0	..	..	1.1	2.02	4.00	5.98
Galt.....	40	..	60	3.0	..	..	1.1	2.02	4.00	5.98
Georgetown.....	45	..	60	2.9	..	..	1.4	2.07	4.59	7.11
Glen Williams.....	45	..	60	3.6	..	..	1.6	2.52	5.40	8.28
†Geraldton.....	43	..	60	4.4	..	..	1.5	2.92	5.62	8.32
Glencoe.....	45	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Goderich.....	52	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
†Gogama.....	..	..	50	7.0	3.5	..	1.6	4.72	10.17	13.05
Grand Bend.....	52	..	60	4.4	..	..	1.5	2.92	5.62	8.32
Grand Valley.....	50	1.67	60	3.0	..	..	1.2	2.05	4.21	6.37
Granton.....	50	..	60	3.9	..	..	1.4	2.61	5.13	7.65
Gravenhurst.....	40	..	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Grimsby.....	46	..	60	2.5	..	..	1.1	1.75	3.73	5.71
Guelph.....	34	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Hagersville.....	41	..	60	2.8	..	..	1.1	1.91	3.89	5.87
†Haileybury.....	37	..	60	3.9	..	..	1.2	2.54	4.70	6.86
Hamilton.....	46	..	60	2.6	..	..	1.1	1.80	3.78	5.76
Hanover.....	38	1.67	60	2.2	..	..	1.0	1.55	3.35	5.15
Harriston.....	39	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Harrow.....	43	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Hastings.....	52	..	45	4.2	..	..	1.0	2.20	4.00	5.80
Havelock.....	45	..	60	3.6	..	..	1.5	2.48	5.18	7.88
Hawkesbury.....	36	..	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Hearst.....	60	..	50	5.4	2.7	..	1.6	3.64	8.01	10.89
Hensall.....	48	..	60	3.2	..	..	1.0	2.09	3.89	5.69
†Hepworth.....	43	..	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Hespeler.....	42	..	60	3.2	..	..	1.1	2.12	4.10	6.08
Highgate.....	47	..	60	3.2	..	..	0.9	2.05	3.67	5.29
Holstein.....	75	1.67	60	3.0	..	..	1.0	1.98	3.78	5.58
†Hornepayne.....	60	..	60	8.0	..	..	2.0	5.04	8.64	12.24
†Hudson Townsite.....	45	..	60	4.4	..	..	1.7	2.99	6.05	9.11
Huntsville.....	40	..	60	2.4	..	..	1.2	1.73	3.89	6.05
†Ignace.....	60	..	60	8.0	..	..	2.0	5.04	8.64	12.24
Ingersoll.....	46	..	60	3.4	..	..	1.3	2.30	4.64	6.98
Iroquois.....	43	..	60	2.8	..	..	1.2	1.94	4.10	6.26

†Local system

For explanatory notes and water-heating schedules see pages 272 to 275.

# Utilities and Local Systems

## FOR ELECTRICAL SERVICE

### December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
1.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
1.6	0.8	0.5	1.89	2.61	3.06	1.00	..	1.0	..	0.5	0.33	1.80	2.25	2.55
2.5	..	1.2	2.70	3.78	4.86	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
2.0	..	1.2	2.25	3.33	4.41	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
1.9	..	0.4	2.16	2.52	2.88	1.00	1.4	..	0.9	..	0.25	1.93	2.16	2.38
2.5	..	1.0	2.70	3.60	4.50	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
2.5	..	1.0	2.70	3.60	4.50	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
2.4	..	1.4	2.61	3.87	5.13	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
3.1	..	1.6	3.24	4.68	6.12	1.35	2.6	..	1.7	..	0.33	3.15	3.45	3.74
3.9	..	1.5	3.96	5.31	6.66	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.4	..	0.5	0.33	3.06	3.51	3.81
5.8	0.8	0.5	5.67	6.39	6.84	1.00	..	5.1	..	0.5	0.33	5.49	5.94	6.24
3.9	..	1.3	3.96	5.13	6.30	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10
2.5	..	1.2	2.70	3.78	4.86	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
3.4	..	1.3	3.51	4.68	5.85	1.35	2.6	..	1.7	..	0.33	3.15	3.45	3.74
1.6	0.8	0.5	1.89	2.61	3.06	1.00	..	1.1	..	0.5	0.33	1.89	2.34	2.64
2.0	..	1.0	2.25	3.15	4.05	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.0	0.8	0.5	2.25	2.97	3.42	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82
2.3	..	0.9	2.52	3.33	4.14	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
3.4	..	1.2	3.51	4.59	5.67	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
d1.9	..	0.7	2.16	2.79	3.42	1.00	1.4	..	0.9	..	0.40	1.93	2.29	2.65
1.7	..	1.0	1.98	2.88	3.78	1.00	1.5	..	0.9	..	0.30	1.98	2.25	2.52
2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.2	..	0.5	0.33	2.88	3.33	3.63
3.6	..	1.0	3.69	4.59	5.49	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
3.1	..	1.3	3.24	4.41	5.58	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
3.2	0.8	0.5	3.33	4.05	4.50	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
5.4	0.8	0.5	5.31	6.03	6.48	1.00	..	4.1	..	0.5	0.33	4.59	5.04	5.34
2.7	..	0.9	2.88	3.69	4.50	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
3.2	0.8	0.5	3.33	4.05	4.50	1.00	..	2.4	..	0.5	0.33	3.06	3.51	3.81
2.6	..	0.9	2.79	3.60	4.41	1.20	1.6	..	1.0	..	0.33	2.25	2.55	2.84
2.8	..	0.7	2.97	3.60	4.23	1.35	2.6	..	1.7	..	0.33	3.15	3.45	3.74
2.5	..	0.8	2.70	3.42	4.14	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
7.5	..	2.0	7.20	9.00	10.80	1.35	4.9	..	3.3	..	0.33	4.90	5.20	5.50
3.9	..	1.5	3.96	5.31	6.66	1.35	3.8	..	2.5	..	0.33	4.05	4.35	4.64
2.2	..	1.1	2.43	3.42	4.41	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
7.5	..	2.0	7.20	9.00	10.80	1.35	4.9	..	3.3	..	0.33	4.90	5.20	5.50
2.8	..	0.8	2.97	3.69	4.41	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.3	..	1.0	2.52	3.42	4.32	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Jarvis.....	44	..	60	2.8	..	..	0.9	1.84	3.46	5.08
†Jellicoe Townsite.....	45	..	60	4.4	..	..	1.7	2.99	6.05	9.11
Kapuskasing.....	35	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
†Kearns Townsite.....		..	b40	3.5	..	..	‡ {1.6 0.75	2.63	4.90	6.25
Kemptville.....	45	..	55	3.2	..	..	1.0	1.99	3.79	5.59
Kincardine.....	45	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
†King Kirkland Townsite..	45	..	b40	3.5	..	..	‡ {1.6 0.75	2.63	4.90	6.25
Kingston.....	38	..	60	1.8	..	..	0.9	1.30	2.92	4.54
Kingsville.....	40	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Kirkfield.....	45	..	50	5.0	..	..	1.2	2.79	4.95	7.11
†Kirkland Lake (including Swastika).....	42	..	..	Spec.	..	..	..	2.30	4.60	6.60
Kitchener.....	42	..	60	2.6	..	..	1.3	1.87	4.21	6.55
Lakefield.....	38	..	55	2.8	..	..	1.0	1.79	3.59	5.39
Lambeth.....	43	..	60	3.5	..	..	1.3	2.36	4.70	7.04
Lanark.....	36	..	60	2.5	..	..	1.1	1.75	3.73	5.71
Lancaster.....	43	..	60	2.3	..	..	1.0	1.60	3.40	5.20
Larder Lake Twp.....	46	..	60	3.5	..	..	1.1	2.29	4.27	6.25
•La Salle.....	42	..	50	3.8	1.9	1.1	1.5	2.56	5.62	7.60
Latchford.....	44	..	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Leamington.....	41	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Lindsay.....		..	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Listowel.....	44	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
London.....	44	1.67	60	2.8	..	..	1.2	1.94	4.10	6.26
London Twp.....	39	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Long Branch.....	40	..	60	2.4	..	..	1.2	1.73	3.89	6.05
L'Orignal.....	40	..	50	4.2	2.1	1.2	1.6	2.83	6.21	8.37
Lucan.....	48	..	60	3.4	..	..	1.4	2.34	4.86	7.38
Lucknow.....	45	..	55	2.7	..	..	1.0	1.75	3.55	5.35
Lynden.....		..	60	3.2	..	..	1.1	2.12	4.10	6.08
Madoc.....	47	..	60	2.9	..	..	1.2	2.00	4.16	6.32
Magnetawan.....	52	..	60	4.7	..	..	2.0	3.26	6.86	10.46
Markdale.....	45	1.67	60	2.5	..	..	1.0	1.71	3.51	5.31
Markham.....	45	..	50	3.0	1.6	1.0	1.3	2.07	4.68	6.48
Marmora.....	48	..	60	3.6	..	..	1.0	2.30	4.10	5.90
Martintown.....	40	..	60	4.0	..	..	1.2	2.59	4.75	6.91
Massey.....	48	..	50	5.0	2.5	1.4	1.6	3.37	7.38	9.90
†Matachewan Twp.....	45	..	50	4.5	..	..	1.0	2.47	4.27	6.07
†Matheson.....	45	..	b40	3.5	..	..	‡ {1.6 0.75	2.63	4.90	6.25
†Mattawa.....	45	..	50	5.2	2.6	..	1.6	3.51	7.74	10.62
Maxville.....	58	..	55	3.1	..	..	1.0	1.94	3.74	5.53

†Local system  
•Annexed to Sandwich West Twp. effective January 1959.  
For explanatory notes and water-heating schedules see pages 272 to 275.

# Utilities and Local Systems

## FOR ELECTRICAL SERVICE

### December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours	Demand rate per kw	First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$		\$	¢	¢	¢	¢	¢	\$	\$
2.3	..	0.6	2.52	3.06	3.60	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
3.9	..	1.5	3.96	5.31	6.66	1.35	3.8	..	2.5	..	0.33	4.05	4.35	4.64
¶2.7	0.8	0.5	2.88	3.60	4.05	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
3.5	..	1.0	3.60	4.50	5.40	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.7	..	1.0	2.88	3.78	4.68	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
¶2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
3.5	..	1.0	3.60	4.50	5.40	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
1.5	..	0.9	1.80	2.61	3.42	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
¶2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
4.5	..	1.0	4.50	5.40	6.30	1.35	4.1	..	2.7	..	0.33	4.27	4.57	4.87
Spec.	..	..	3.50	4.50	5.50	..	Spec.	..	..	..	..	3.50	4.50	5.50
2.3	..	1.0	2.52	3.42	4.32	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.4	..	0.8	2.61	3.33	4.05	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
3.1	..	1.1	3.24	4.23	5.22	1.35	4.1	..	2.7	..	0.33	4.27	4.57	4.87
2.0	..	1.0	2.25	3.15	4.05	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
1.8	..	1.0	2.07	2.97	3.87	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
3.0	..	1.0	3.15	4.05	4.95	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10
¶3.3	0.8	0.5	3.42	4.14	4.59	1.00	..	2.3	..	0.5	0.33	2.97	3.42	3.72
¶2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
¶2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
¶2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
¶2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
2.2	..	0.6	2.43	2.97	3.51	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
¶2.7	0.8	0.5	2.88	3.60	4.05	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
¶1.9	..	1.1	2.16	3.15	4.14	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
¶2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
3.0	..	1.1	3.15	4.14	5.13	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.2	..	0.8	2.43	3.15	3.87	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.7	..	1.0	2.88	3.78	4.68	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
2.5	..	1.1	2.70	3.69	4.68	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
4.2	..	2.0	4.23	6.03	7.83	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
2.0	..	1.0	2.25	3.15	4.05	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
3.2	..	0.9	3.33	4.14	4.95	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
3.5	..	1.2	3.60	4.68	5.76	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
¶4.4	0.8	0.5	4.41	5.13	5.58	1.00	..	3.1	..	0.5	0.33	3.69	4.14	4.44
3.5	..	1.0	3.60	4.50	5.40	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
3.5	..	1.0	3.60	4.50	5.40	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
5.2	0.8	0.5	5.13	5.85	6.30	1.00	..	3.2	..	0.5	0.33	3.78	4.23	4.53
2.8	..	1.0	2.97	3.87	4.77	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
McGarry.....	46	..	60	3.5	..	..	1.1	2.29	4.27	6.25
Meaford.....	46	1.67	60	2.6	..	..	1.0	1.76	3.56	5.36
Merlin.....	44	..	60	3.1	..	..	1.0	2.03	3.83	5.63
Merrickville.....	40	..	60	3.0	..	..	1.3	2.99	4.43	6.77
Merritton.....	43	..	60	3.2	..	..	1.3	2.20	4.54	6.88
Midland.....	39	..	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Mildmay.....	40	1.67	60	2.5	..	..	1.0	1.71	3.51	5.31
Millbrook.....	48	..	60	4.6	..	..	1.0	2.84	4.64	6.44
Milton.....	43	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Milverton.....	48	..	60	3.4	..	..	1.3	2.30	4.64	6.98
Mimico.....	37	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Mitchell.....	40	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Moorefield.....	40	..	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Morrisburg.....	43	..	60	3.0	..	..	1.0	1.98	3.78	5.58
Mount Brydges.....	41	..	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Mount Forest.....	39	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Napanee.....	39	..	60	2.8	..	..	1.1	1.91	3.89	5.87
Neustadt.....	37	1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Newboro.....	40	..	60	4.0	..	..	1.4	2.66	5.18	7.70
Newburgh.....	40	..	60	4.3	..	..	1.2	2.75	4.91	7.07
Newbury.....	50	..	60	4.0	..	..	1.0	2.52	4.32	6.12
Newcastle.....	43	..	60	3.0	..	..	0.9	1.94	3.56	5.18
New Hamburg.....	43	..	60	3.2	..	..	1.3	2.20	4.54	6.88
†New Liskeard.....	42	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Newmarket.....	40	..	60	2.5	..	..	1.0	1.71	3.51	5.31
New Toronto.....	42	1.67	60	2.6	..	..	1.2	1.84	4.00	6.16
Niagara.....	41	..	60	3.0	..	..	1.4	2.12	4.64	7.16
Niagara Falls.....	40	1.67	50	3.0	1.4	..	1.0	1.98	4.32	6.12
Nipigon Twp.....	32	..	60	2.8	..	..	1.0	1.87	3.67	5.47
North Bay.....	42	..	60	2.5	..	..	1.2	1.78	3.94	6.10
North York Twp.....	37	1.67	60	2.7	..	..	1.3	1.93	4.27	6.61
Norwich.....	46	..	60	3.4	..	..	1.2	2.27	4.43	6.59
Norwood.....	45	..	50	3.9	..	..	1.1	2.25	4.23	6.21
Oakville.....	44	..	60	3.0	..	..	1.4	2.12	4.64	7.16
Oil Springs.....	52	..	60	3.0	..	..	1.0	1.98	3.78	5.58
Omeme.....	44	..	60	3.3	..	..	1.0	2.14	3.94	5.74
Orangeville.....	45	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Orillia.....	36	1.67	60	2.3	..	..	0.9	1.57	3.19	4.81
Orono.....	45	..	60	3.5	..	..	1.2	2.32	4.48	6.64
Oshawa.....	35	..	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54

†Local system  
For explanatory notes and water-heating schedules see pages 272 to 275.



Utilities and Local Systems  
FOR ELECTRICAL SERVICE  
December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
3.0	..	1.0	3.15	4.05	4.95	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10
2.2	..	0.8	2.43	3.15	3.87	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.6	..	0.7	2.79	3.42	4.05	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.5	..	1.2	2.70	3.78	4.86	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
2.7	..	1.1	2.88	3.87	4.86	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
¶1.7	0.8	0.5	1.98	2.70	3.15	1.00	..	1.0	..	0.5	0.33	1.80	2.25	2.55
2.0	..	0.9	2.25	3.06	3.87	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
4.2	..	1.0	4.23	5.13	6.03	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
¶2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
3.0	..	1.4	3.15	4.41	5.67	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
¶2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
¶2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
¶2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
2.7	..	0.8	2.88	3.60	4.32	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
¶2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
¶2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
2.5	..	1.0	2.70	3.60	4.50	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
¶1.6	0.8	0.5	1.89	2.61	3.06	1.00	..	1.0	..	0.5	0.33	1.80	2.25	2.55
3.5	..	1.2	3.60	4.68	5.76	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
3.8	..	1.2	3.87	4.95	6.03	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
3.5	..	0.9	3.60	4.41	5.22	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
2.5	..	0.8	2.70	3.42	4.14	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
2.7	..	1.2	2.88	3.96	5.04	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
¶2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.4	..	0.5	0.33	3.06	3.51	3.81
2.2	..	1.0	2.43	3.33	4.23	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
¶2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
2.5	..	1.2	2.70	3.78	4.86	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
¶2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
2.4	..	0.8	2.61	3.33	4.05	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
2.0	..	0.9	2.25	3.06	3.87	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.2	..	1.1	2.43	3.42	4.41	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
3.0	..	1.0	3.15	4.05	4.95	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
3.4	..	0.9	3.51	4.32	5.13	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
2.5	..	1.3	2.70	3.87	5.04	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.6	..	1.0	2.79	3.69	4.59	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.8	..	0.8	2.97	3.69	4.41	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
¶2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
1.8	..	0.8	2.07	2.79	3.51	1.00	1.4	..	0.9	..	0.30	1.93	2.20	2.47
3.0	..	1.1	3.15	4.14	5.13	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
¶1.8	0.8	0.5	2.07	2.79	3.24	1.00	..	1.2	..	0.5	0.33	1.98	2.43	2.73

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Ottawa (including East- view and Rockcliffe Park).....	32	..	a { 60	* { 2.0	..	..	*0.5	1.74	3.02	3.92
Otterville.....	46	..	60	3.0	..	..	1.0	1.98	3.78	5.58
Owen Sound.....	38	1.67	60	2.4	..	..	1.1	1.69	3.67	5.65
Paisley.....	45	1.67	60	3.5	..	..	1.0	2.25	4.05	5.85
Palmerston.....	44	..	60	2.6	..	..	1.0	1.76	3.56	5.36
Paris.....	42	..	60	2.8	..	..	1.3	1.98	4.32	6.66
Parkhill.....	44	..	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Parry Sound.....	42	..	60	2.8	..	..	1.2	1.94	4.10	6.26
Penetanguishene.....	45	..	60	2.5	..	..	1.1	1.75	3.73	5.71
Perth.....	37	..	55	2.8	..	..	1.0	1.79	3.59	5.39
Peterborough.....	40	..	60	2.6	..	..	1.3	1.87	4.21	6.55
Petrolia.....	50	..	60	3.6	..	..	1.2	2.38	4.54	6.70
Pickering.....	38	..	50	4.0	2.0	1.1	1.6	2.70	5.89	7.87
†Pickle Lake Landing Townsite.....	45	..	60	4.4	..	..	1.7	2.99	6.05	9.11
Picton.....	41	..	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Plattsville.....	42	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Point Edward.....	38	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Port Arthur.....	34	..	60	2.0	..	..	0.8	1.37	2.81	4.25
Port Burwell.....	47	..	50	4.4	2.2	1.3	1.6	2.97	6.52	8.86
†Port Carling.....	41	..	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Port Colborne.....	41	..	60	2.8	..	..	1.2	1.94	4.10	6.26
Port Credit.....	38	1.67	60	2.7	..	..	1.3	1.93	4.27	6.61
Port Dalhousie.....	40	..	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Port Dover.....	45	..	60	2.4	..	..	1.2	1.73	3.89	6.05
Port Elgin.....	45	1.80	60	3.5	..	..	1.3	2.36	4.70	7.04
Port Hope.....	45	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Port McNicoll.....	48	..	60	3.3	..	..	1.0	2.14	3.94	5.74
Port Perry.....	41	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Port Rowan.....	50	..	60	3.2	..	..	1.1	2.12	4.10	6.08
Port Stanley.....	43	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
†Powassan.....	39	..	50	3.6	1.8	1.0	1.4	2.43	5.31	7.11
Prescott.....	37	..	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Preston.....	37	1.67	60	3.3	..	..	1.3	2.25	4.59	6.93
Priceville.....	47	..	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Princeton.....	48	..	60	3.0	..	..	1.0	1.98	3.78	5.58
Queenston.....	40	..	60	2.8	..	..	1.3	1.98	4.32	6.66
Rainy River.....	57	..	50	6.8	3.4	..	1.6	4.59	9.90	12.78
†Red Lake Townsite.....	45	..	60	4.4	..	..	1.7	2.99	6.05	9.11
Red Rock.....	32	..	60	2.6	..	..	1.1	1.80	3.78	5.76
Renfrew.....	40	..	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34

†Local system  
For explanatory notes and water-heating schedules see pages 272 to 275.

# Utilities and Local Systems FOR ELECTRICAL SERVICE

December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	\$	\$	\$	
2.0	0.8	0.5	2.25	2.97	3.42	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
2.5	..	0.8	2.70	3.42	4.14	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
2.0	0.8	0.5	2.25	2.97	3.42	1.00	1.5	..	1.1	..	0.30	2.07	2.34	2.61
3.0	..	1.9	3.15	4.05	4.95	1.35	2.6	..	1.7	..	0.33	3.15	3.45	3.74
2.2	..	0.8	2.43	3.15	3.87	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
2.3	..	0.8	2.52	3.24	3.96	1.00	1.5	..	1.1	..	0.30	2.07	2.34	2.61
2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.2	..	0.5	0.33	2.88	3.33	3.63
2.3	..	1.2	2.52	3.60	4.68	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
2.1	..	1.0	2.34	3.24	4.14	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
2.0	..	0.6	2.25	2.79	3.33	1.00	1.3	..	0.8	..	0.25	1.84	2.07	2.29
2.1	..	1.2	2.34	3.42	4.50	1.20	1.4	..	0.9	..	0.30	2.11	2.38	2.65
3.1	..	1.9	3.24	4.14	5.04	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
3.9	..	1.5	3.96	5.31	6.66	1.35	3.8	..	2.5	..	0.33	4.05	4.35	4.64
2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
1.9	..	0.4	2.16	2.52	2.88	1.00	1.4	..	0.9	..	0.25	1.93	2.16	2.38
3.4	0.8	0.5	3.51	4.23	4.68	1.00	..	2.5	..	0.5	0.33	3.15	3.60	3.90
4.2	0.8	0.5	4.23	4.95	5.40	1.00	..	2.7	..	0.5	0.33	3.33	3.78	4.08
2.5	..	1.1	2.70	3.69	4.68	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.2	..	1.2	2.43	3.51	4.59	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
3.0	0.8	0.5	3.15	3.87	4.32	1.00	..	2.6	..	0.5	0.33	3.24	3.69	3.99
2.0	..	1.0	2.25	3.15	4.05	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.8	..	1.0	2.97	3.87	4.77	1.35	2.5	..	1.6	..	0.33	3.96	3.36	3.65
2.7	0.8	0.5	2.88	3.60	4.05	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
2.8	..	0.8	2.97	3.69	4.41	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
1.9	0.8	0.5	2.16	2.88	3.33	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
2.7	..	0.9	2.88	3.69	4.50	1.35	3.2	..	2.1	..	0.33	3.60	3.90	4.19
2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
3.4	0.8	0.5	3.51	4.23	4.68	1.00	..	2.7	..	0.5	0.33	3.33	3.78	4.08
2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.3	..	0.5	0.33	2.97	2.52	2.82
2.8	..	0.9	2.97	3.78	4.59	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
3.8	0.8	0.5	3.87	4.59	5.04	1.00	..	2.9	..	0.5	0.33	3.51	3.96	4.26
2.7	..	0.8	2.88	3.60	4.32	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.4	..	1.2	2.61	3.69	4.77	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
6.0	0.8	0.5	5.85	6.57	7.02	1.00	..	5.0	..	0.8	0.50	5.40	6.12	6.57
3.9	..	1.5	3.96	5.31	6.66	1.35	3.8	..	2.5	..	0.33	4.05	4.35	4.64
2.1	..	1.0	2.34	3.24	4.14	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Richmond.....	54	..	40	4.3	..	..	1.2	2.20	4.36	6.52
Richmond Hill.....	45	..	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Ridgetown.....	51	..	60	2.9	..	..	1.1	1.96	3.94	5.92
Ripley.....	43	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Riverside.....	41	1.67	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Rockland.....	33	..	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Rockwood.....	48	..	60	3.3	..	..	1.3	2.25	4.59	6.93
Rodney.....	52	..	60	2.5	..	..	1.0	1.71	3.51	5.31
Rosseau.....	43	..	60	3.5	..	..	1.6	2.47	5.35	8.23
Russell.....	36	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
St. Catharines.....	42	..	60	2.7	..	..	1.5	2.00	4.70	7.40
St. Clair Beach.....	42	1.67	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
St. George.....	44	..	60	2.5	..	..	0.9	1.67	3.29	4.91
St. Jacobs.....	42	..	60	3.0	..	..	1.1	2.02	4.00	5.98
St. Mary's.....	43	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
St. Thomas.....	43	1.67	60	3.2	..	..	1.2	2.16	4.32	6.48
Sandwich East Twp.....	43	1.78	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Sandwich West Twp.....	43	..	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Sarnia.....	40	..	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Scarborough Twp.....	43	..	60	2.7	..	..	1.3	1.93	4.27	6.61
Schreiber Twp.....	31	..	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Seaforth.....	36	..	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Shelburne.....	45	1.67	60	3.0	..	..	1.2	2.05	4.21	6.37
Simcoe.....	42	..	60	2.5	..	..	1.0	1.71	3.51	5.31
Sioux Lookout.....	51	..	60	4.0	..	..	1.5	2.70	5.40	8.10
Smith's Falls.....	38	..	60	2.6	..	..	1.0	1.76	3.56	5.36
Smithville.....	45	..	60	3.2	..	..	1.2	2.16	4.32	6.48
Southampton.....	48	..	50	3.2	..	..	1.1	1.93	3.91	5.89
†South Porcupine Townsite	42	..	..	Spec.	..	..	..	2.30	4.60	6.60
Springfield.....	49	..	60	3.4	..	..	0.9	2.16	3.78	5.40
Stamford Twp.....	40	1.67	60	3.2	..	..	1.4	2.23	4.75	7.27
Stayner.....	41	1.67	60	3.0	..	..	1.2	2.05	4.21	6.37
Stirling.....	40	..	60	2.7	..	..	1.3	1.93	4.27	6.61
Stoney Creek.....	41	..	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Stouffville.....	45	1.67	60	2.6	..	..	1.1	1.80	3.78	5.76
Stratford.....	40	1.67	60	2.9	..	..	1.2	2.00	4.16	6.32
Strathroy.....	42	..	60	3.1	..	..	0.9	2.00	3.62	5.24
Streetsville.....	42	..	60	2.9	..	..	1.3	2.03	4.37	6.71
Sturgeon Falls.....	41	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Sudbury.....	37	..	60	2.6	..	..	1.2	1.84	4.00	6.16

†Local system  
For explanatory notes and water-heating schedules see pages 272 to 275.

# Utilities and Local Systems FOR ELECTRICAL SERVICE December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
4.0	..	1.0	4.05	4.95	5.85	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
2.9	0.8	0.5	3.06	3.78	4.23	1.00	..	2.3	..	0.5	0.33	2.97	3.42	3.72
2.4	..	0.9	2.61	3.42	4.23	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
¶2.7	0.8	0.5	2.88	3.60	4.05	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
¶2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
¶2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82
2.8	..	1.2	2.97	4.05	5.13	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.2	..	0.8	2.43	3.15	3.87	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
3.0	..	1.6	3.15	4.59	6.03	1.35	2.6	..	1.7	..	0.33	3.15	3.45	3.74
¶2.0	0.8	0.5	2.25	2.97	3.42	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
d2.3	..	1.1	2.52	3.51	4.50	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
¶3.0	0.8	0.5	3.15	3.87	4.32	1.00	..	2.3	..	0.5	0.33	2.97	3.42	3.72
2.0	..	0.6	2.25	2.79	3.33	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.5	..	1.0	2.70	3.60	4.50	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
¶2.5	0.8	0.5	2.70	3.42	3.87	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
2.3	..	0.6	2.52	3.06	3.60	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
¶3.9	0.8	0.5	3.96	4.68	5.13	1.00	..	3.4	..	0.5	0.33	3.96	4.41	4.71
¶3.9	0.8	0.5	3.96	4.68	5.13	1.00	..	3.4	..	0.5	0.33	3.96	4.41	4.71
¶2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
2.2	..	1.1	2.43	3.42	4.41	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
¶1.7	0.8	0.5	1.98	2.70	3.15	1.00	..	1.2	..	0.5	0.33	1.98	2.43	2.73
¶2.0	0.8	0.5	2.25	2.97	3.42	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
2.5	..	1.2	2.70	3.78	4.86	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.0	..	0.8	2.25	2.97	3.69	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
3.5	..	2.0	3.60	5.40	7.20	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.0	..	0.7	2.25	2.88	3.51	1.00	1.5	..	1.1	..	0.25	2.07	2.29	2.52
2.8	..	1.1	2.97	3.96	4.95	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
2.9	..	1.1	3.06	4.05	5.04	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
Spec.	..	..	3.50	4.50	5.50	..	Spec.	..	..	..	..	3.50	4.50	5.50
2.9	..	0.8	3.06	3.78	4.50	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.9	..	1.3	3.06	4.23	5.40	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.5	..	1.2	2.70	3.78	4.86	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.2	..	1.3	2.43	3.60	4.77	1.20	1.7	..	1.2	..	0.30	2.38	2.55	2.92
¶2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
2.1	..	1.1	2.34	3.33	4.32	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
2.4	..	0.7	2.61	3.24	3.87	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.5	..	0.6	2.70	3.24	3.78	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.4	..	1.3	2.61	3.78	4.95	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
¶2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
2.4	..	1.2	2.61	3.69	4.77	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Sunderland.....	45	..	60	3.5	..	..	1.0	2.25	4.05	5.85
Sundridge.....	52	..	60	4.2	..	..	1.6	2.84	5.72	8.60
Sutton.....	48	..	60	2.7	..	..	1.0	1.82	3.62	5.42
Swansea.....	41	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Tara.....	44	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Tavistock.....	44	..	60	2.7	..	..	1.4	1.96	4.48	7.00
Tecumsh.....	41	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Teeswater.....	42	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Terrace Bay.....	35	..	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Thamesford.....	49	..	60	3.6	..	..	1.5	2.48	5.18	7.88
Thamesville.....	45	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Thedford.....	56	..	60	3.6	..	..	1.0	2.30	4.10	5.90
Thessalon.....	49	..	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Thornbury.....	48	..	60	3.5	..	..	1.3	2.36	4.70	7.04
Thorndale.....	42	..	50	3.6	1.8	1.0	1.4	2.43	5.31	7.11
†Thornloe.....	..	..	..	Spec.	..	..	..	2.30	4.60	6.60
Thornton.....	62	..	60	3.8	..	..	1.0	2.41	4.21	6.01
Thorold.....	40	..	60	2.7	..	..	1.4	1.96	4.48	7.00
Tilbury.....	51	..	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Tillsonburg.....	43	..	60	3.2	..	..	1.2	2.16	4.32	6.48
†Timmins (including Schumacher).....	42	..	..	Spec.	..	..	..	2.30	4.60	6.60
Toronto (including Leaside).....	**	2.10	60	2.0	..	..	1.4	1.58	4.10	6.62
Toronto Twp.....	37	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Tottenham.....	44	1.67	50	3.5	..	..	1.0	2.02	3.82	5.62
Trafalgar Twp.....	43	1.89	50	3.8	1.9	1.1	1.5	2.56	5.62	7.60
Trenton.....	33	..	60	1.8	..	..	0.8	1.26	2.70	4.14
Tweed.....	33	..	50	1.8	0.9	0.7	1.0	1.21	2.74	4.00
Uxbridge.....	41	..	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Vankleek Hill.....	41	..	60	4.5	..	..	1.5	2.97	5.67	8.37
Victoria Harbour.....	49	..	60	3.2	..	..	1.3	2.20	4.54	6.88
Walkerton.....	38	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Wallaceburg.....	41	..	50	2.6	1.3	0.7	1.0	1.75	3.82	5.78
Wardsville.....	52	..	60	3.6	..	..	0.9	2.27	3.89	5.51
Warkworth.....	52	..	50	3.5	..	..	1.2	2.12	4.28	6.44
Wasaga Beach.....	42	..	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Waterdown.....	42	..	60	2.6	..	..	1.2	1.84	4.00	6.16
Waterford.....	42	..	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Waterloo.....	39	1.67	60	2.6	..	..	1.1	1.80	3.78	5.76
Watford.....	46	..	60	3.1	..	..	1.1	2.07	4.05	6.03
Waubashene.....	45	..	60	3.2	..	..	1.2	2.16	4.32	6.48

†Local system

For explanatory notes and water-heating schedules see pages 272 to 275.

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand							First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
3.0	..	0.8	3.15	3.87	4.59	1.35	3.2	..	2.1	..	0.33	3.60	3.90	4.19
3.7	..	1.6	3.78	5.22	6.66	1.35	3.4	..	2.2	..	0.33	3.73	4.03	4.33
2.4	..	0.7	2.61	3.24	3.87	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
1.9	0.8	0.5	2.16	2.88	3.33	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82
2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
2.3	..	1.4	2.52	3.78	5.04	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
2.7	0.8	0.5	2.88	3.60	4.05	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.8	..	0.5	0.33	2.52	2.97	3.27
1.8	0.8	0.5	2.07	2.79	3.24	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82
3.1	..	1.4	3.24	4.50	5.76	1.35	2.9	..	1.9	..	0.33	3.37	3.67	3.97
2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	2.1	..	0.5	0.33	2.79	3.24	3.54
3.2	..	0.7	3.33	3.96	4.59	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
4.0	0.8	0.5	4.05	4.77	5.22	1.00	..	3.2	..	0.5	0.33	3.78	4.23	4.53
3.1	..	1.3	3.24	4.41	5.58	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
3.2	0.8	0.5	3.33	4.05	4.50	1.00	..	2.4	..	0.5	0.33	3.06	3.51	3.81
Spec.	..	..	3.50	4.50	5.50	..	Spec.	..	..	..	..	3.50	4.50	5.50
3.3	..	1.0	3.42	4.32	5.22	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.2	..	1.2	2.43	3.51	4.59	1.20	1.7	..	1.2	..	0.30	2.38	2.65	2.92
2.6	0.8	0.5	2.79	3.51	3.96	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
2.7	..	1.0	2.88	3.78	4.68	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
Spec.	..	..	3.50	4.50	5.50	..	Spec.	..	..	..	..	3.50	4.50	5.50
c2.1	..	0.7	2.65	3.28	3.91	1.10	2.1	..	1.4	..	0.38	2.56	2.91	3.25
2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
3.0	..	1.0	3.15	4.05	4.95	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
3.0	0.8	0.5	3.15	3.87	4.32	1.00	..	2.4	..	0.5	0.33	3.06	3.51	3.81
1.6	..	0.6	1.89	2.43	2.97	1.00	1.5	..	1.1	..	0.25	2.07	2.29	2.52
1.6	0.8	0.5	1.89	2.61	3.06	1.00	..	0.8	..	0.5	0.33	1.62	2.07	2.37
2.4	0.8	0.5	2.61	3.33	3.78	1.00	..	1.9	..	0.5	0.33	2.61	3.06	3.36
4.0	..	1.5	4.05	5.40	6.75	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
2.7	..	1.3	2.88	4.05	5.22	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.4	..	0.5	0.33	2.16	2.61	2.91
2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
3.2	..	0.8	3.33	4.05	4.77	1.35	2.8	..	1.8	..	0.33	3.28	3.58	3.88
3.0	..	1.0	3.15	4.05	4.95	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10
3.0	0.8	0.5	3.15	3.87	4.32	1.00	..	2.5	..	0.5	0.33	3.15	3.60	3.90
2.2	..	1.2	2.43	3.51	4.59	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.7	0.8	0.5	2.88	3.60	4.05	1.00	..	2.0	..	0.5	0.33	2.70	3.15	3.45
2.2	..	1.0	2.43	3.33	4.23	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
2.8	..	0.9	2.97	3.78	4.59	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
2.6	..	1.2	2.79	3.87	4.95	1.35	3.2	..	2.1	..	0.33	3.60	3.90	4.19



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect  
Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Webbwood.....	48	..	60	6.0	..	..	2.5	4.14	8.64	13.14
Welland.....	42	..	60	2.4	..	..	1.1	1.69	3.67	5.65
Wellesley.....	45	..	60	3.3	..	..	1.3	2.25	4.59	6.93
Wellington.....	41	..	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
West Ferris Twp.....	37	..	60	3.8	..	..	1.5	2.59	5.29	7.99
West Lorne.....	52	..	60	3.3	..	..	1.2	2.21	4.37	6.53
Weston.....	37	1.67	60	2.5	..	..	1.2	1.78	3.94	6.10
Westport.....	40	..	60	3.0	..	..	1.0	1.98	3.78	5.58
Wheatley.....	53	..	60	3.3	..	..	1.2	2.21	4.37	6.53
Whitby.....	41	..	60	2.7	..	..	1.2	1.89	4.05	6.21
†White River.....	60	..	50	7.0	3.5	..	1.6	4.72	10.17	13.05
Warton.....	43	..	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Williamsburg.....	40	..	60	2.0	..	..	0.8	1.37	2.81	4.25
Winchester.....	42	..	60	2.5	..	..	1.2	1.78	3.94	6.10
Windermere.....	45	..	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Windsor.....	40	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Wingham.....	44	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Woodbridge.....	44	..	60	2.8	..	..	1.2	1.94	4.10	6.26
Woodstock.....	39	..	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Woodville.....	48	..	60	3.8	..	..	1.2	2.48	4.64	6.80
Wyoming.....	50	..	60	3.4	..	..	1.0	2.20	4.00	5.80
York Twp.....	42	..	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Zurich.....	51	..	60	3.7	..	..	1.2	2.43	4.59	6.75

† Local system

NOTES

■ House Heating

Applicable where electric energy is used to heat an entire dwelling or a portion of a dwelling in excess of 25% of the floor area.

Service Charges

- a 33¢ per month per service when the permanently installed appliance load is under 2,000 watts and 66¢ per month when 2,000 watts or more.
- b 56¢ per month.
- c Demand rate 8.5¢ per 100 watts, minimum 50¢.
- d Minimum demand charge 25¢.

# Utilities and Local Systems FOR ELECTRICAL SERVICE December 31, 1958

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
5.5	..	2.5	5.40	7.65	9.90	1.35	3.5	..	2.3	..	0.33	3.82	4.12	4.42
2.1	..	1.0	2.34	3.24	4.14	1.20	1.9	..	1.3	..	0.30	2.52	2.79	3.06
2.8	..	1.2	2.97	4.05	5.13	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
¶1.8	0.8	0.5	2.07	2.79	3.24	1.00	..	1.3	..	0.5	0.33	2.07	2.52	2.82
3.3	..	1.2	3.42	4.50	5.58	1.35	2.3	..	1.5	..	0.33	2.92	3.22	3.52
2.8	..	1.2	2.97	4.05	5.13	1.35	2.9	..	1.9	..	0.33	3.37	3.67	3.97
2.0	..	1.0	2.25	3.15	4.05	1.20	1.6	..	1.0	..	0.30	2.25	2.52	2.79
2.5	..	1.0	2.70	3.60	4.50	1.35	2.2	..	1.4	..	0.33	2.83	3.13	3.43
2.9	..	1.2	3.06	4.14	5.22	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
2.3	..	1.0	2.52	3.42	4.32	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
¶5.8	0.8	0.5	5.67	6.39	6.84	1.00	..	5.1	..	0.5	0.33	5.49	5.94	6.24
¶2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.7	..	0.5	0.33	2.43	2.88	3.18
2.0	..	0.8	2.25	2.97	3.69	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10
2.0	..	1.1	2.25	3.24	4.23	1.35	2.0	..	1.3	..	0.33	2.70	3.00	3.29
¶2.8	0.8	0.5	2.97	3.69	4.14	1.00	..	2.3	..	0.5	0.33	2.97	3.42	3.72
¶2.2	0.8	0.5	2.43	3.15	3.60	1.00	..	1.5	..	0.5	0.33	2.25	2.70	3.00
¶2.1	0.8	0.5	2.34	3.06	3.51	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
2.3	..	1.2	2.52	3.60	4.68	1.20	2.1	..	1.4	..	0.30	2.65	2.92	3.19
¶2.3	0.8	0.5	2.52	3.24	3.69	1.00	..	1.6	..	0.5	0.33	2.34	2.79	3.09
3.2	..	1.2	3.33	4.41	5.49	1.35	2.5	..	1.6	..	0.33	3.06	3.36	3.65
2.9	..	0.7	3.06	3.69	4.32	1.35	3.2	..	2.1	..	0.33	3.60	3.90	4.19
¶1.7	0.8	0.5	1.98	2.70	3.15	1.00	..	1.2	..	0.5	0.33	1.98	2.43	2.73
3.4	..	0.9	3.51	4.32	5.13	1.35	3.1	..	2.0	..	0.33	3.51	3.81	4.10

## NOTES

### Special Rates or Discounts

‡2-wire service next 80 kwh; 3-wire service next 180 kwh.

\*First 60 kwh of monthly consumption at 2.0¢, second 60 kwh and all kwh in excess of 1,000 at 1.0¢.

\*\*Flat-rate water-heater service—Toronto:

System-owned—First 400 watts \$2.90 per month.

Each 100 watts additional 40¢ per month, plus a monthly charge for larger tank sizes as follows:

30¢ for 1,000-watt and 1,200-watt heaters.

40¢ for 1,500-watt heaters.

50¢ for 2,000-watt and 2,500-watt heaters.

55¢ for heaters 3,000 watts and over.

Customer-owned—First 400 watts \$1.98 per month.

Each 100 watts additional 40¢ per month.

¶Commercial customers with a connected load of under 5 kilowatts billed at domestic rates.

§Farm customers billed at standard rural rates.

§§Farm customers billed at special rates.

Municipal Electrical  
GROSS MONTHLY ENERGY RATES

Subject to 10%

Element rating	SCHEDULE																
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
watts	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
400	1.00	1.04	1.08	1.12	1.16	1.20	1.24	1.28	1.32	1.36	1.40	1.44	1.48	1.52	1.56	1.60	1.64
450	1.12	1.17	1.21	1.26	1.30	1.36	1.40	1.44	1.49	1.53	1.58	1.62	1.67	1.71	1.76	1.80	1.84
500	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05
550	1.38	1.43	1.49	1.54	1.60	1.66	1.70	1.76	1.81	1.87	1.92	1.98	2.03	2.09	2.14	2.20	2.26
600	1.50	1.56	1.62	1.68	1.74	1.80	1.86	1.92	1.98	2.04	2.10	2.16	2.22	2.28	2.34	2.40	2.46
650	1.59	1.66	1.71	1.78	1.84	1.91	1.97	2.03	2.10	2.16	2.22	2.29	2.36	2.41	2.48	2.54	2.61
700	1.68	1.74	1.81	1.88	1.94	2.01	2.08	2.14	2.21	2.28	2.34	2.41	2.48	2.54	2.61	2.68	2.74
750	1.78	1.84	1.91	1.99	2.06	2.12	2.20	2.27	2.34	2.41	2.48	2.56	2.62	2.69	2.77	2.83	2.91
800	1.86	1.93	2.00	2.08	2.16	2.22	2.30	2.38	2.44	2.52	2.60	2.67	2.74	2.82	2.90	2.97	3.04
850	1.94	2.02	2.10	2.18	2.26	2.33	2.41	2.49	2.57	2.64	2.72	2.80	2.88	2.96	3.03	3.11	3.19
900	2.04	2.12	2.20	2.29	2.37	2.44	2.53	2.61	2.69	2.78	2.86	2.93	3.02	3.10	3.18	3.27	3.34
950	2.13	2.22	2.30	2.39	2.48	2.56	2.64	2.73	2.81	2.90	2.99	3.07	3.16	3.24	3.33	3.41	3.50
1000	2.22	2.31	2.40	2.49	2.58	2.67	2.76	2.84	2.93	3.02	3.11	3.20	3.29	3.38	3.47	3.56	3.64

NOTE: Gross monthly rates for all element sizes over 1,000 watts are calculated as follows:

Rate for 1,000 watt element  $\times \frac{\text{Element rating}}{1000}$

Utilities and Local Systems  
FOR FLAT-RATE WATER-HEATING

*prompt payment discount*

NUMBER																		
42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1.68	1.72	1.76	1.80	1.84	1.88	1.92	1.96	2.00	2.04	2.08	2.12	2.16	2.20	2.24	2.28	2.32	2.36	2.40
1.89	1.93	1.98	2.02	2.07	2.11	2.16	2.20	2.26	2.29	2.34	2.38	2.42	2.47	2.52	2.56	2.60	2.66	2.72
2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00
2.31	2.37	2.42	2.48	2.53	2.59	2.64	2.70	2.76	2.81	2.86	2.92	2.98	3.03	3.08	3.14	3.20	3.26	3.32
2.52	2.58	2.64	2.70	2.76	2.82	2.88	2.94	3.00	3.06	3.12	3.18	3.24	3.30	3.36	3.42	3.48	3.54	3.60
2.67	2.73	2.80	2.86	2.92	2.99	3.06	3.11	3.18	3.25	3.32	3.37	3.42	3.49	3.56	3.62	3.68	3.75	3.82
2.81	2.88	2.94	3.01	3.08	3.14	3.21	3.28	3.34	3.42	3.48	3.55	3.62	3.69	3.76	3.82	3.88	3.95	4.02
2.98	3.04	3.12	3.19	3.26	3.33	3.40	3.48	3.54	3.62	3.68	3.75	3.82	3.90	3.98	4.05	4.12	4.18	4.24
3.12	3.19	3.27	3.34	3.41	3.49	3.57	3.63	3.71	3.79	3.86	3.93	4.00	4.08	4.16	4.24	4.32	4.38	4.44
3.27	3.34	3.42	3.50	3.58	3.66	3.73	3.81	3.90	3.96	4.04	4.12	4.20	4.28	4.36	4.44	4.52	4.59	4.66
3.42	3.51	3.59	3.67	3.76	3.83	3.91	4.00	4.08	4.16	4.24	4.32	4.40	4.49	4.58	4.66	4.74	4.81	4.88
3.59	3.67	3.76	3.84	3.92	4.01	4.10	4.18	4.27	4.35	4.44	4.52	4.60	4.69	4.78	4.87	4.96	5.04	5.12
3.73	3.82	3.91	4.00	4.09	4.18	4.27	4.36	4.44	4.53	4.62	4.71	4.80	4.89	4.98	5.07	5.16	5.25	5.34



**Forty Major Municipal**  
(Arranged in descending order)  
**CUSTOMERS, REVENUE,**  
**for the Year Ended**

Municipality	Total revenue including street lighting	Total consumption including street lighting	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	\$	kwh	\$	kwh	No.	kwh	¢
Toronto (including Leaside) .....	34,854,893	2,900,634,585	11,461,317	917,181,240	170,167	449	1.25
Hamilton .....	13,082,985	1,489,579,171	3,713,176	317,825,946	65,302	406	1.17
◆ Ottawa (including Eastview and Rockcliffe Park) .....	9,016,126	904,569,345	3,923,818	503,587,808	70,169	598	0.78
North York Twp. ....	7,775,714	645,105,147	4,587,300	405,993,963	61,207	553	1.13
Scarborough Twp. ....	6,456,048	504,937,795	3,796,172	294,113,177	50,632	484	1.29
Etobicoke Twp. (including Thistletown) .....	5,166,396	476,919,949	2,904,193	258,234,451	**40,582		
◆ Windsor .....	4,209,659	353,097,709	1,404,477	124,367,652	34,199	303	1.13
London .....	3,739,463	325,291,110	1,516,189	115,645,889	28,222	341	1.31
◆ York Twp. ....	3,044,134	302,947,997	1,944,115	204,934,612	37,390	457	0.95
◆ Oshawa .....	2,428,885	281,017,502	846,743	103,974,318	15,988	542	0.81
◆ Toronto Twp. ....	2,754,664	279,973,476	997,262	82,971,098	13,035	530	1.20
Kitchener .....	3,302,838	274,795,503	1,326,657	111,628,750	18,929	491	1.19
◆ Sarnia .....	2,313,202	264,359,085	646,917	50,090,033	13,396	312	1.29
St. Catharines .....	2,273,472	193,108,910	738,629	59,421,184	11,846	418	1.24
Brantford .....	2,024,668	186,170,990	835,544	72,760,027	14,637	414	1.15
Peterborough .....	1,850,007	182,549,644	829,567	85,604,987	12,597	566	0.97
Fort William .....	1,574,298	179,065,919	696,519	89,859,418	11,400	657	0.78
Port Arthur .....	1,630,954	176,755,716	660,399	78,363,720	11,211	582	0.84
Kinross .....	1,806,406	176,051,402	795,151	86,453,566	12,937	557	0.92
◆ East York Twp. ....	1,804,901	166,009,682	1,209,315	113,713,561	20,362	465	1.06
◆ Guelph .....	1,385,782	129,276,346	647,831	58,059,146	9,966		
Sudbury .....	1,732,529	128,073,333	979,314	83,651,277	13,818	504	1.17
◆ New Toronto .....	1,033,484	117,915,398	202,670	17,798,834	3,476	427	1.14
Galt .....	1,088,254	89,376,561	445,614	36,702,849	7,363	415	1.21
◆ Niagara Falls .....	967,139	82,191,486	388,416	32,021,134	6,904	387	1.21
Merritton .....	679,158	82,135,723	93,667	7,792,680	1,622	400	1.20
◆ Woodstock .....	904,340	77,859,599	387,481	31,341,545	5,947	439	1.24
Trenton .....	577,124	77,592,540	172,839	21,513,921	3,427	523	0.80
Belleville .....	675,997	76,448,774	325,007	41,495,849	6,011	575	0.78
Barrie .....	700,758	69,578,716	351,855	36,173,351	5,345	564	0.97
Chatham .....	1,147,137	68,574,111	308,918	16,561,045	6,236	221	1.87
Stamford Twp. ....	890,351	68,425,319	538,562	45,285,717	8,013	471	1.19
North Bay .....	821,370	67,751,240	419,584	37,274,383	5,845	531	1.13
Stratford .....	824,782	66,667,980	416,786	34,917,031	6,100	477	1.19
St. Thomas .....	783,371	66,602,459	348,908	27,096,449	6,055	373	1.29
Brockville .....	629,276	64,193,197	249,013	24,135,941	4,495	447	1.03
Waterloo .....	756,822	62,996,639	360,294	33,467,941	5,233	533	1.08
Orillia .....	666,324	62,744,478	233,312	23,760,517	4,306	460	0.98
Forest Hill .....	753,671	60,222,125	539,849	46,201,350	6,243	617	1.17
Welland .....	706,200	59,870,448	179,339	14,737,728	4,515	272	1.22

\*\* Small commercial customers transferred to domestic billing

◆ New municipal resale rate structure

◆ and with small commercial customers transferred to domestic billing

**Electrical Utilities**  
of total consumption)

**AND CONSUMPTION**

**December 31, 1958**

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
9,036,649	608,792,670	27,592	1,839	1.48	13,502,227	1,329,533,505	6,535	368,450	16,954	1.02
1,949,882	154,126,860	7,920	1,622	1.27	7,103,796	1,000,964,108	1,382	224,489	60,357	0.71
4,209,585	339,344,940	10,143	2,788	1.24	583,235	50,707,385	209	20,243	20,218	1.15
1,758,586	104,528,975	4,719	1,846	1.68	1,287,499	124,117,049	881	42,027	11,740	1.04
1,016,846	61,426,153	3,174	1,613	1.66	1,461,202	141,962,865	532	42,237	22,237	1.03
754,410	52,064,341	**1,408	.....	.....	1,364,963	159,195,697	695	44,367	.....	.....
775,311	58,314,145	2,108	2,305	1.33	1,820,952	162,032,552	750	61,794	18,004	1.12
868,871	63,469,066	2,808	1,884	1.37	1,218,129	140,295,075	425	41,021	27,509	0.87
405,922	32,976,279	1,052	2,612	1.23	578,976	59,684,786	430	20,881	11,567	0.97
340,473	28,227,664	1,420	1,657	1.21	1,148,928	144,062,720	243	36,963	49,404	0.80
296,615	19,849,908	874	1,893	1.49	1,407,891	175,328,890	133	32,572	109,855	0.80
602,022	37,984,122	1,663	1,903	1.58	1,277,773	120,639,831	363	36,365	27,695	1.06
301,608	20,819,246	773	2,244	1.45	1,309,477	191,239,206	150	30,434	106,244	0.68
428,394	25,029,424	1,553	1,343	1.71	1,044,722	105,911,502	264	30,179	33,432	0.99
326,729	25,724,346	1,504	1,425	1.27	804,335	84,782,493	296	29,283	23,869	0.95
387,729	24,462,789	1,368	1,490	1.58	563,703	69,676,468	237	19,063	24,499	0.81
331,825	32,407,403	1,466	1,842	1.02	481,451	54,131,098	226	20,314	19,960	0.89
339,193	31,207,007	1,435	1,812	1.09	578,282	64,384,989	172	25,015	31,194	0.90
599,789	50,904,067	1,833	2,314	1.18	368,153	36,943,769	243	12,779	12,669	1.00
206,088	14,831,329	723	1,709	1.39	317,112	34,540,992	193	10,417	14,914	0.92
248,935	16,803,525	1,042	.....	.....	448,754	52,564,155	193	14,968	.....	.....
503,124	29,461,423	1,572	1,562	1.71	166,150	12,942,633	204	4,930	5,287	1.28
84,351	6,320,887	207	2,545	1.33	733,171	93,247,477	85	21,585	91,419	0.79
170,266	9,627,454	769	1,043	1.77	424,036	41,105,918	204	14,221	16,792	1.03
302,761	24,385,042	547	3,715	1.24	237,822	23,854,910	55	7,375	36,144	1.00
33,947	1,751,000	147	993	1.94	545,203	72,325,443	29	14,406	207,832	0.75
129,837	8,516,649	347	2,045	1.52	353,451	36,368,605	135	10,669	22,450	0.97
77,255	7,020,288	383	1,527	1.10	312,949	48,326,611	84	10,192	47,943	0.65
195,287	17,008,931	993	1,427	1.15	134,526	16,926,474	158	5,699	8,927	0.79
173,344	12,217,159	697	1,461	1.42	161,965	20,496,486	100	6,312	17,080	0.79
350,167	16,633,313	1,032	1,343	2.11	427,359	33,605,083	227	12,203	12,337	1.27
168,254	7,841,080	494	1,323	2.15	149,047	13,810,122	80	4,277	14,386	1.08
247,912	18,389,518	1,011	1,516	1.35	128,046	10,879,139	127	3,839	7,139	1.18
159,901	10,177,050	624	1,359	1.57	216,731	20,083,099	147	7,365	11,385	1.08
159,833	11,457,980	713	1,339	1.39	254,797	27,362,830	102	8,394	22,355	0.93
96,409	7,404,340	572	1,079	1.30	269,070	32,105,816	97	9,219	27,582	0.84
126,305	7,435,843	420	1,475	1.70	236,523	20,478,991	105	6,905	16,253	1.15
140,781	10,774,537	648	1,386	1.31	277,416	27,480,084	129	10,910	17,752	1.01
165,456	10,470,000	572	1,525	1.58	31,962	2,513,575	98	1,161	2,137	1.27
149,542	9,537,458	620	1,282	1.57	342,780	34,160,062	134	10,299	21,244	1.00

Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Acton.....	4,053	1,297	80,201	6,166,939	1,130	455	1.30
Ailsa Craig.....	516	225	8,767	593,190	183	270	1.48
◆ Ajax.....	7,982	2,149	134,977	10,443,482	1,963		
◆ Alexandria.....	2,620	835	34,184	3,014,312	749		
◆ Alfred.....	1,007	294	11,312	575,482	270		
Alliston.....	2,903	1,015	50,714	4,656,195	831	467	1.09
◆ Almonte.....	3,164	1,039	44,647	4,909,703	959		
Alvinston.....	641	316	7,069	378,760	247	128	1.87
◆ Amherstburg.....	4,504	1,387	88,841	7,385,220	1,250		
Ancaster Twp (including Ancaster) .	13,189	1,100	91,936	7,017,565	1,026	570	1.31
Apple Hill.....	400	123	4,240	254,890	102	208	1.66
◆ Arkona.....	440	188	10,312	711,975	176	337	1.45
◆ Arnprior.....	5,407	1,694	82,587	8,355,657	1,571	443	0.99
◆ Arthur.....	1,203	476	20,180	1,710,900	423	337	1.18
◆ Athens.....	943	336	10,951	1,119,189	320	291	0.98
◆ Atikokan Twp.....	6,430	1,843	149,098	11,428,066	1,714	556	1.30
◆ Aurora.....	4,371	1,665	76,818	7,783,362	1,436	452	0.99
Aylmer.....	4,411	1,591	67,990	6,110,408	1,323	385	1.11
Ayr.....	969	362	16,690	1,421,776	297	399	1.17
◆ Baden.....	803	266	14,249	1,188,398	251	395	1.20
◆ † Bala.....	*475	752	25,097	1,055,243	674		
Bancroft.....	2,612	780	41,893	2,783,220	648	358	1.51
Barrie.....	20,243	6,142	351,855	36,173,351	5,345	564	0.97
◆ Barry's Bay.....	1,479	390	12,865	575,931	362		
Bath.....	676	234	13,560	949,461	209	379	1.43
◆ Beachville.....	818	282	15,065	1,348,190	273	412	1.12
Beamsville.....	2,291	789	45,860	4,285,153	673	531	1.07
† Beardmore.....	1,137	295	16,642	920,396	227	338	1.81
Beaverton.....	1,111	525	23,083	1,796,490	430	348	1.28
Beeton.....	739	304	14,371	951,770	251	316	1.51
◆ Belle River.....	1,830	657	27,097	1,413,310	597	197	1.92
Belleville.....	28,032	7,162	325,007	41,495,849	6,011	575	0.78
Blenheim.....	2,860	1,082	31,265	1,975,960	879	187	1.58
◆ † Blind River.....	3,933	1,218	71,227	4,114,063	1,123		
◆ Bloomfield.....	744	307	11,071	1,059,450	284		
Blyth.....	733	328	12,849	978,810	249	328	1.31
Bobcaygeon.....	1,184	675	24,021	1,428,750	552	216	1.68
◆ Bolton.....	1,556	561	37,261	2,579,687	524	410	1.44
Bothwell.....	807	317	7,470	551,366	239	192	1.35
◆ Bowmanville.....	7,112	2,365	114,725	11,621,936	2,194	441	0.99

† Local system

◆ New municipal resale rate structure

◆ and with small commercial customers transferred to domestic billing

\* Excluding summer population

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
29,111	1,464,799	138	885	1.99	83,263	6,356,721	29	2,278	18,266	1.31
4,313	204,618	38	449	2.11	4,117	153,742	4	119	3,203	2.68
41,631	2,035,072	120	.....	.....	138,922	11,114,148	66	3,701	.....	.....
21,292	1,357,721	68	.....	.....	21,227	1,274,252	18	737	.....	.....
5,579	202,378	16	.....	.....	5,910	236,173	8	190	.....	.....
23,180	1,311,224	156	700	1.77	15,265	1,176,294	28	500	3,501	1.30
14,297	920,132	55	.....	.....	30,810	3,424,025	25	1,196	.....	.....
6,084	269,090	61	368	2.26	2,243	78,961	8	72	823	2.84
34,601	2,084,387	111	.....	.....	57,632	4,874,165	26	1,541	.....	.....
17,254	679,956	63	899	2.54	3,834	214,670	11	115	1,626	1.79
1,270	56,740	21	225	2.24	.....	.....	.....	.....	.....	.....
2,019	131,156	10	1,093	1.54	2,154	122,756	2	61	5,115	1.75
28,802	2,056,536	90	1,904	1.40	55,323	4,790,558	33	1,903	12,097	1.15
6,933	356,682	38	782	1.94	5,111	310,660	15	201	1,726	1.65
1,777	136,690	14	814	1.30	917	51,403	2	50	2,142	1.78
47,998	2,879,417	103	2,330	1.67	29,422	2,660,258	26	807	8,526	1.11
38,349	2,815,380	189	1,241	1.36	49,906	4,470,787	40	1,681	9,314	1.12
43,029	3,105,282	235	1,101	1.39	70,520	6,108,251	33	2,632	15,425	1.15
8,023	441,217	53	694	1.82	9,002	367,377	12	306	2,551	2.45
2,142	140,059	10	1,167	1.53	15,746	1,261,395	5	494	21,023	1.25
10,209	437,688	73	.....	.....	1,087	59,944	5	46	.....	.....
26,672	1,237,790	120	860	2.15	11,946	604,020	12	393	4,195	1.98
173,344	12,217,159	697	1,461	1.42	161,965	20,496,486	100	6,312	17,080	0.79
8,300	334,588	25	.....	.....	918	62,690	3	21	.....	.....
3,307	131,776	24	458	2.51	384	6,810	1	16	568	5.64
1,661	74,509	7	887	2.23	89,678	12,883,170	2	1,907	536,799	0.70
17,614	1,014,527	105	805	1.74	9,783	576,655	11	408	4,369	1.70
15,735	656,620	66	829	2.40	110	250	2	7	.....	.....
11,058	664,680	84	659	1.66	20,393	1,343,426	11	675	10,177	1.52
4,978	199,315	44	377	2.50	5,625	320,430	9	131	2,967	1.76
13,195	687,780	55	1,042	1.92	3,584	240,702	5	98	4,012	1.49
195,287	17,008,931	993	1,427	1.15	134,526	16,926,474	158	5,699	8,927	0.79
30,716	1,583,878	179	737	1.94	27,342	1,371,995	24	791	4,764	1.99
46,059	2,284,939	79	.....	.....	20,411	1,318,641	16	457	.....	.....
5,557	311,160	15	.....	.....	2,760	57,008	8	132	.....	.....
6,995	359,066	72	416	1.95	13,020	945,855	7	270	11,260	1.38
12,281	561,365	116	403	2.19	6,167	274,801	7	201	3,271	2.24
6,583	331,760	19	1,455	1.98	5,483	264,458	18	188	1,224	2.07
6,658	413,050	69	499	1.61	5,515	114,850	9	225	1,063	4.80
32,280	2,392,629	132	1,510	1.35	84,049	9,017,777	39	2,950	19,269	0.93



# Municipal Electrical CUSTOMERS, REVENUE, for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Bracebridge.....	2,802	1,242	63,115	4,526,560	1,014	372	1.39
◆ Bradford.....	2,212	770	38,750	3,278,150	675	.....	.....
Braeside.....	510	153	6,510	385,664	142	226	1.69
Brampton.....	14,374	4,446	261,661	21,949,430	3,898	469	1.19
Brantford.....	52,668	16,437	835,544	72,760,027	14,637	414	1.15
◆ Brantford Twp.....	6,722	1,953	211,518	11,931,475	1,825	.....	.....
◆ Brechin.....	219	95	3,373	295,865	79	312	1.14
◆ Bridgeport.....	1,602	406	27,758	2,202,051	382	.....	.....
Brigden.....	525	220	4,920	330,530	161	171	1.49
◆ Brighton.....	2,256	939	40,038	3,674,740	861	356	1.09
Brockville.....	15,701	5,164	249,013	24,135,941	4,495	447	1.03
Bronte.....	*2,254	711	41,088	2,724,286	638	356	1.51
Brussels.....	808	374	15,157	1,250,550	285	366	1.21
◆ Burford.....	1,041	421	25,098	1,752,049	342	427	1.43
Burgessville.....	248	99	5,123	394,438	78	421	1.30
Burk's Falls.....	895	325	14,605	933,320	254	306	1.56
◆ Burlington.....	37,630	12,033	277,743	22,734,298	11,484	.....	.....
◆ Cache Bay.....	896	201	8,117	344,003	186	.....	.....
Caledonia.....	2,170	764	25,928	1,911,066	626	254	1.36
Campbellville.....	342	84	5,943	428,530	73	489	1.39
Cannington.....	1,012	439	18,854	1,545,854	355	363	1.22
Capreol.....	2,474	904	62,373	4,247,190	816	434	1.47
Cardinal.....	2,040	631	34,070	2,917,402	558	436	1.17
◆ Carleton Place.....	4,684	1,667	89,394	7,351,137	1,550	395	1.22
◆ Casselman.....	1,264	360	19,490	1,055,630	339	259	1.85
◆ Cayuga.....	850	351	12,001	846,407	310	228	1.42
◆ Chalk River.....	986	267	19,429	1,062,067	255	347	1.83
Chapleau Twp.....	3,714	957	75,917	1,383,433	843	137	5.49
Chatham.....	22,352	7,495	308,918	16,561,045	6,236	221	1.87
◆ Chatsworth.....	394	166	7,351	581,650	146	332	1.26
Chesley.....	1,650	702	28,367	2,480,150	574	360	1.14
Chesterville.....	1,229	441	18,280	1,497,202	353	353	1.22
Chippawa.....	2,380	891	40,548	3,214,490	809	331	1.26
◆ Clifford.....	538	216	11,772	845,710	195	361	1.39
Clinton.....	2,970	1,153	66,922	5,176,057	945	456	1.29
† Cobalt.....	2,212	749	38,285	2,389,303	625	319	1.60
◆ Cobden.....	877	370	14,108	1,511,124	345	365	0.93
◆ Cobourg.....	8,919	3,126	194,912	17,107,288	2,880	.....	.....
Cochrane.....	4,396	1,251	86,788	6,520,105	1,032	526	1.33
Colborne.....	1,228	529	24,428	2,092,260	431	405	1.17

† Local system

◆ New municipal resale rate structure with small commercial customers transferred to domestic billing

\* Included with Trafalgar Twp. effective January 1, 1959

Utilities and Local Systems  
AND CONSUMPTION  
December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
43,165	2,910,619	208	1,166	1.48	11,519	728,554	20	440	3,036	1.58
22,364	1,151,050	66			18,454	1,711,190	29	521		
862	34,842	9	323	2.47	9,950	599,150	2	307	24,965	1.66
106,671	6,603,887	431	1,277	1.62	109,456	9,686,440	117	3,823	6,899	1.13
326,729	25,724,346	1,504	1,425	1.27	804,335	84,782,493	296	29,283	23,869	0.95
49,427	2,209,252	91			89,486	4,600,501	37	2,461		
2,441	140,749	15	782	1.73	578	23,620	1	26	1,968	2.45
7,289	434,299	20			2,687	174,620	4	123		
4,461	250,000	51	408	1.78	4,538	128,830	8	142	1,342	3.52
13,823	802,294	66	1,013	1.72	7,366	549,265	12	287	3,814	1.34
96,409	7,404,340	572	1,079	1.30	269,070	32,105,816	97	9,219	27,582	0.84
12,385	621,065	64	809	1.99	3,735	241,714	9	119	2,238	1.55
8,676	448,759	80	467	1.93	6,932	303,545	9	183	2,811	2.28
8,628	464,634	73	530	1.86	5,098	289,000	6	154	4,014	1.76
1,906	84,434	18	391	2.26	1,665	29,030	3	69	806	5.73
10,332	454,410	66	574	2.27	2,878	89,150	5	83	1,486	3.23
114,827	6,920,257	428			56,927	4,120,040	121	1,544		
1,082	34,307	12			12,073	458,478	3	250		
16,927	1,039,774	117	741	1.63	13,137	825,677	21	399	3,276	1.59
1,151	56,440	10	470	2.04	494	48,800	1	8	4,067	1.01
7,458	381,443	72	441	1.96	5,933	220,795	12	211	1,533	2.69
11,867	763,758	85	749	1.55	13,834	1,134,170	3	315	31,505	1.22
8,986	496,895	70	592	1.81	1,522	106,354	3	43	2,954	1.43
22,678	1,208,942	90	1,119	1.88	42,287	3,725,914	27	1,279	11,500	1.13
4,004	174,180	14	1,037	2.30	11,641	658,320	7	348	7,837	1.77
7,278	434,113	32	1,131	1.68	4,196	123,440	9	198	1,143	3.40
3,578	222,846	10	1,857	1.61	4,382	280,050	2	107	11,669	1.56
34,609	545,796	98	464	6.34	14,223	431,171	16	147	2,246	3.30
350,167	16,633,313	1,032	1,343	2.11	427,359	33,605,083	227	12,203	12,337	1.27
3,481	201,740	19	885	1.73	1,066	43,800	1	32	3,650	2.43
13,626	724,495	101	598	1.88	11,819	722,800	27	441	2,231	1.64
9,127	500,477	78	535	1.82	26,577	2,780,737	10	695	23,173	0.96
9,870	512,780	74	577	1.92	2,638	252,159	8	117	2,627	1.05
3,329	174,990	14	1,042	1.90	3,731	261,015	7	83	3,107	1.43
32,960	1,689,041	180	782	1.95	22,891	1,427,064	28	587	4,247	1.60
25,000	1,021,011	113	753	2.45	8,146	713,169	11	232	5,403	1.14
3,566	232,161	18	1,075	1.54	3,833	194,419	7	192	2,315	1.97
84,265	5,049,566	182			139,812	13,556,179	64	4,140		
51,134	2,813,246	189	1,240	1.82	20,936	1,667,443	30	528	4,632	1.26
13,192	602,886	90	558	2.19	4,205	259,205	8	117	2,700	1.62

Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Coldwater.....	720	257	11,699	965,670	207	389	1.21
Collingwood.....	8,302	2,933	131,442	11,026,661	2,511	366	1.19
Comber.....	570	235	6,275	362,290	169	179	1.73
◆ Coniston.....	2,549	638	38,923	2,781,461	621	373	1.40
Cookstown.....	662	246	10,846	816,780	208	327	1.33
◆ Cottam.....	629	234	8,043	561,590	212	221	1.43
◆ Courtright.....	567	195	5,371	399,232	182	183	1.35
Creemore.....	884	356	15,423	1,325,160	299	369	1.16
◆ Dashwood.....	382	174	10,271	639,521	164	325	1.61
◆ † Deep River.....	4,403	1,264	33,759	4,090,434	1,152		
Delaware.....	419	137	9,074	616,849	118	436	1.47
Delhi.....	3,189	1,288	51,155	4,128,171	1,021	337	1.24
◆ Deseronto.....	1,798	633	26,727	2,382,211	589	337	1.12
◆ Dorchester.....	800	306	13,030	1,000,669	291	287	1.30
Drayton.....	586	266	11,948	713,879	216	275	1.67
◆ Dresden.....	2,203	885	28,073	1,709,510	799	178	1.64
Drumbo.....	352	163	7,235	570,999	127	375	1.27
Dryden.....	4,993	1,583	109,928	8,373,376	1,374	508	1.31
Dublin.....	256	112	5,092	390,770	81	402	1.30
◆ Dundalk.....	853	405	15,399	1,074,650	356		
Dundas.....	10,597	3,356	183,612	14,931,691	2,972	419	1.23
Dunnville.....	5,092	1,854	58,624	3,516,566	1,537	191	1.67
Durham.....	2,065	805	33,012	2,645,160	655	337	1.25
◆ Dutton.....	783	348	10,098	696,242	320	181	1.45
◆ East York Twp.....	68,312	21,278	1,209,315	113,713,561	20,362	465	1.06
Eganville.....	1,570	549	23,312	1,395,373	448	260	1.67
† Elk Lake Townsite.....	\$450	184	6,350	426,924	135	264	1.49
◆ Elmira.....	2,890	1,081	65,060	5,455,216	990	459	1.19
◆ Elmvale.....	917	377	16,441	1,440,980	336	357	1.14
◆ Elmwood.....	\$406	135	3,967	293,730	123	199	1.35
Elora.....	1,468	532	29,263	1,913,263	455	350	1.53
Embro.....	542	228	12,289	978,736	179	456	1.26
† Englehart.....	1,633	590	37,342	2,202,142	486	378	1.70
Erieau.....	451	320	12,148	848,790	284	249	1.43
Erie Beach.....	*96	134	4,627	139,250	128	91	3.32
◆ Erin.....	996	394	19,524	1,428,140	366	325	1.37
Essex.....	3,480	1,183	40,628	2,701,254	968	233	1.50
Etobicoke Twp (including Thistletown).....	121,258	42,685	2,904,193	258,234,451	**40,582		
Exeter.....	2,758	1,162	66,561	4,837,761	952	423	1.38
Fergus.....	3,725	1,297	83,291	6,032,821	1,121	448	1.38

† Local system  
◆ New municipal resale rate structure  
◆ and with small commercial customers transferred to domestic billing  
§ Estimated  
\* Excluding summer population  
† Five months' operation

Utilities and Local Systems  
AND CONSUMPTION  
December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
6,149	373,119	46	876	1.65	7,434	355,306	4	232	7,402	2.09
69,133	4,218,080	362	971	1.64	90,031	8,537,752	60	3,218	11,858	1.05
6,057	278,648	58	400	2.17	6,725	224,632	8	214	2,340	2.99
5,610	270,485	16	1,409	2.07	175	6,880	1	7	573	2.54
3,550	119,075	34	292	2.98	2,444	169,826	4	87	3,538	1.44
2,583	129,620	16	675	1.99	2,688	76,587	6	128	1,064	3.51
1,539	107,524	11	815	1.43	583	68,456	2	16	2,852	0.85
5,309	267,480	53	421	1.98	2,050	92,240	4	95	1,922	2.22
1,652	79,660	7	948	2.07	1,182	30,970	3	65	860	3.82
13,808	1,026,522	104			2,246	261,623	8	196		
3,592	143,746	19	630	2.50						
44,637	2,379,405	226	877	1.88	37,473	2,100,205	41	1,258	4,269	1.78
5,441	347,046	28	1,033	1.57	13,644	892,480	16	529	4,648	1.53
1,330	59,590	12	414	2.23	2,443	119,010	3	83	3,306	2.05
4,502	216,020	46	391	2.08	2,216	76,483	4	66	1,593	2.90
20,892	1,207,520	60	1,677	1.73	26,432	1,460,501	26	828	4,681	1.81
2,610	128,586	33	325	2.03	1,658	42,045	3	64	1,168	3.94
74,734	3,014,335	189	1,329	2.48	7,821	391,100	20	246	1,630	2.00
3,459	194,050	29	558	1.78	3,679	144,500	2	79	6,021	2.55
8,575	363,525	37			5,515	254,690	12	214		
74,248	4,152,837	313	1,106	1.79	86,323	7,158,188	71	3,174	8,402	1.21
54,064	2,922,101	277	879	1.85	88,065	7,120,189	40	2,197	14,834	1.24
18,279	913,275	125	609	2.00	29,516	1,627,986	25	903	5,427	1.81
3,890	189,629	15	1,053	2.05	5,803	485,376	13	234	3,111	1.20
206,088	14,831,329	723	1,709	1.39	317,112	34,540,992	193	10,417	14,914	0.92
16,210	672,939	89	630	2.41	6,221	399,831	12	169	2,777	1.56
4,889	265,902	44	504	1.84	9,840	309,993	5	248	5,167	3.17
22,110	1,320,377	63	1,747	1.67	71,847	6,185,694	28	1,962	18,410	1.16
6,375	396,500	34	972	1.61	1,539	136,650	7	53	1,627	1.13
1,129	64,710	10	539	1.75	2,150	83,200	2	83	3,457	2.58
9,684	417,962	71	491	2.32	6,767	385,750	6	198	5,358	1.75
3,196	210,365	45	390	1.52	4,232	171,170	4	103	3,566	2.47
19,430	714,856	93	641	2.72	9,177	722,880	11	195	5,476	1.27
6,679	340,395	30	946	1.96	8,217	288,270	6	189	4,004	2.85
483	13,485	6	187	3.58						
5,126	284,870	24	989	1.80	1,359	68,240	4	48	1,422	1.99
32,664	1,961,774	181	903	1.67	23,696	1,231,512	34	810	3,018	1.92
754,410	52,064,341	**1,408			1,364,963	159,195,697	695	44,367		
26,933	1,442,514	179	672	1.87	19,488	1,042,164	31	682	2,802	1.87
31,361	1,594,330	147	904	1.97	56,230	4,105,266	29	1,676	11,797	1.37

\*\* Small commercial customers transferred to domestic billing



Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
◆Finch.....	413	188	6,822	621,816	175	296	1.10
◆Flesherton.....	480	236	7,135	724,184	209	289	0.99
Fonthill.....	2,100	720	45,022	3,746,536	642	486	1.20
◆Forest.....	2,025	863	43,418	3,845,850	793	404	1.13
Forest Hill.....	19,992	6,913	539,849	46,201,350	6,243	617	1.17
Fort William.....	41,791	13,092	696,519	89,859,418	11,400	657	0.78
Frankford.....	1,631	554	22,799	1,793,949	473	316	1.27
Galt.....	25,102	8,336	445,614	36,702,849	7,363	415	1.21
Georgetown.....	8,200	3,005	188,863	14,137,803	2,762	427	1.34
†Geraldton.....	3,269	997	59,972	3,337,800	828	336	1.80
◆Glencoe.....	1,105	474	11,537	890,282	409	181	1.30
◆Goderich.....	6,011	2,239	124,668	9,637,988	2,036	.....	.....
◆†Gogama.....	500	113	7,038	187,150	97	161	3.76
Grand Bend.....	*876	812	34,272	1,632,460	702	194	2.10
Grand Valley.....	667	323	12,806	910,490	259	293	1.41
Granton.....	296	118	5,448	316,370	95	278	1.72
◆Gravenhurst.....	3,075	1,290	50,280	5,541,760	1,156	399	0.91
Grimsby.....	4,501	1,587	67,404	5,987,693	1,331	375	1.13
◆Guelph.....	35,787	11,201	647,831	58,059,146	9,966	.....	.....
Hagersville.....	2,106	744	24,722	1,836,985	573	267	1.35
†Haileybury.....	2,531	839	49,680	3,915,741	683	478	1.27
Hamilton.....	248,946	74,604	3,713,176	317,825,946	65,302	406	1.17
Hanover.....	4,162	1,509	67,322	6,329,137	1,289	409	1.06
◆Harriston.....	1,637	641	32,154	2,470,287	574	359	1.30
◆Harrow.....	1,828	684	40,543	3,031,257	593	426	1.34
Hastings.....	902	430	13,512	922,103	357	215	1.47
Havelock.....	1,288	418	19,072	1,125,226	348	269	1.69
◆Hawkesbury.....	8,359	2,083	107,310	7,402,970	1,970	.....	.....
◆Hearst.....	2,326	632	58,549	2,649,337	556	397	2.21
Hensall.....	783	338	15,811	1,333,985	259	429	1.19
◆†Hepworth.....	363	126	5,379	292,360	112	.....	.....
Hespeler.....	4,109	1,323	63,097	4,764,302	1,169	340	1.32
Highgate.....	400	163	3,749	241,800	124	163	1.55
Holstein.....	170	92	3,079	239,130	74	269	1.29
†Hornepayne.....	1,400	448	33,995	1,058,067	408	216	3.21
†Hudson Townsite.....	416	179	7,330	325,411	146	186	2.25
Huntsville.....	3,286	1,195	58,771	5,470,788	964	473	1.07
†Ignace.....	634	227	11,859	357,410	192	155	3.32
Ingersoll.....	6,957	2,307	109,426	7,188,814	2,008	298	1.52
Iroquois.....	988	364	23,375	1,860,354	294	527	1.26

† Local system  
◆ New municipal resale rate structure  
◆ and with small commercial customers transferred to domestic billing  
\* Excluding summer population

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
1,054	53,150	8	554	1.98	1,128	72,210	5	38	1,204	1.56
3,813	250,685	25	836	1.52	1,353	83,560	2	61	3,482	1.62
10,854	578,307	70	688	1.88	3,720	120,495	8	127	1,255	3.09
13,946	829,995	47	1,472	1.68	11,317	988,542	23	393	3,582	1.14
165,456	10,470,000	572	1,525	1.58	31,962	2,513,575	98	1,161	2,137	1.27
331,825	32,407,403	1,466	1,842	1.02	481,451	54,131,098	226	20,314	19,960	0.89
8,308	399,763	77	433	2.08	1,371	82,766	4	57	1,724	1.66
170,266	9,627,454	769	1,043	1.77	424,036	41,105,918	204	14,221	16,792	1.03
50,832	2,609,617	208	1,046	1.95	107,203	10,719,028	35	2,899	25,521	1.00
46,900	2,046,712	154	1,108	2.29	2,685	134,370	15	83	747	2.00
12,108	751,076	48	1,304	1.61	7,146	283,888	17	331	1,392	2.52
41,952	2,148,992	142			102,822	6,868,664	61	2,859		
3,731	122,050	14	726	3.06	4,356	235,532	2	57	9,814	1.85
18,285	681,182	110	516	2.68						
5,210	237,553	54	367	2.19	4,531	244,270	10	156	2,036	1.85
1,572	55,253	22	209	2.85	224	2,310	1	10	193	9.69
25,308	2,204,720	106	1,733	1.15	32,915	3,077,363	28	1,267	9,159	1.07
43,190	2,709,237	226	999	1.59	25,087	2,137,639	30	854	5,938	1.17
248,935	16,803,525	1,042			448,754	52,564,155	193	14,968		
25,182	1,434,178	148	808	1.76	42,551	2,999,279	23	1,478	10,867	1.42
29,264	1,285,305	135	793	2.28	10,895	755,516	21	356	2,998	1.44
1,949,882	154,126,860	7,920	1,622	1.27	7,103,796	1,000,964,108	1,382	224,489	60,357	0.71
24,040	1,545,475	181	712	1.56	50,925	4,684,564	39	1,902	10,010	1.09
10,718	606,087	50	1,010	1.77	19,863	1,377,697	17	602	6,753	1.44
19,863	1,098,896	79	1,159	1.81	15,978	603,940	12	556	4,194	2.65
7,471	346,439	67	431	2.16	3,846	148,303	6	122	2,060	2.59
10,670	473,079	67	588	2.26	2,177	111,140	3	54	3,087	1.96
52,129	2,800,483	88			10,700	802,301	25	366		
37,656	1,556,729	66	1,966	2.42	5,709	253,810	10	101	2,115	2.25
8,585	459,970	59	650	1.87	15,741	891,470	20	512	3,714	1.77
2,605	109,620	14								
20,857	1,106,647	122	756	1.88	128,233	13,276,747	32	4,221	34,575	0.97
2,503	99,660	33	252	2.51	4,392	179,690	6	132	2,496	2.44
982	46,440	17	228	2.11	657	48,200	1	12	4,017	1.36
20,018	571,264	39	1,221	3.50	11,363	953,000	1	160	79,417	1.19
5,600	218,613	30	607	2.56	4,058	118,960	3	84	3,304	3.41
48,799	3,038,629	204	1,241	1.61	29,314	2,839,004	27	1,020	8,762	1.03
13,287	363,280	33	917	3.66	3,128	118,450	2	63	4,935	2.64
55,086	3,036,787	252	1,004	1.81	115,057	9,732,981	47	3,556	17,257	1.18
13,591	790,922	60	1,099	1.72	6,060	422,056	10	177	3,517	1.44

# Municipal Electrical CUSTOMERS, REVENUE, for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Jarvis.....	736	264	6,798	519,290	209	207	1.31
†Jellicoe Townsite.....	\$140	49	1,931	87,279	38	191	2.21
◆Kapusking.....	5,911	1,904	114,854	9,802,200	1,695	482	1.17
†Kearns Townsite.....	\$510	183	10,136	773,059	168	383	1.31
Kemptville.....	1,829	730	31,498	2,748,280	609	376	1.15
◆Kincardine.....	2,669	1,158	44,766	4,269,484	1,052	338	1.05
†King Kirkland Townsite.....	\$320	155	4,877	313,691	135	194	1.55
Kingston.....	47,882	15,013	795,151	86,453,566	12,937	557	0.92
◆Kingsville.....	3,010	1,229	41,438	3,707,639	1,082	286	1.12
Kirkfield.....	132	97	3,934	218,010	75	242	1.80
†Kirkland Lake (including Swastika).....	\$18,148	5,682	284,079	20,321,823	4,772	355	1.40
Kitchener.....	66,547	20,955	1,326,657	111,628,750	18,929	491	1.19
Lakefield.....	2,006	691	30,775	2,947,980	579	424	1.04
Lambeth.....	1,678	566	36,581	2,629,689	526	417	1.39
Lanark.....	925	313	9,299	696,072	263	221	1.34
Lancaster.....	628	205	6,436	555,017	165	280	1.16
Larder Lake Twp.....	1,993	585	31,661	2,356,225	518	379	1.34
◆La Salle.....	*2,830	838	61,140	3,966,940	803	412	1.54
◆Latchford.....	440	156	4,333	215,592	146	.....	.....
◆Leamington.....	8,648	3,121	113,583	9,177,844	2,871	266	1.24
◆Lindsay.....	10,321	3,656	197,376	17,067,343	3,371	.....	.....
◆Listowel.....	3,530	1,424	69,895	5,908,774	1,272	387	1.18
London.....	99,115	31,455	1,516,189	115,645,889	28,222	341	1.31
◆London Twp.....	36,376	957	59,815	4,517,055	934	403	1.32
Long Branch.....	11,010	3,984	208,861	18,657,020	**3,815	.....	.....
◆L'Orignal.....	1,078	329	15,523	786,396	311	211	1.97
Lucan.....	921	349	20,488	1,454,063	277	437	1.41
Lucknow.....	962	452	14,418	1,220,600	346	294	1.18
Lynden.....	532	172	9,954	796,905	152	437	1.25
Madoc.....	1,502	581	25,001	1,865,660	449	346	1.34
Magnetawan.....	251	100	3,928	138,490	77	150	2.84
Markdale.....	984	409	15,163	1,381,135	314	367	1.10
◆Markham.....	3,991	1,250	85,267	6,629,050	1,102	501	1.29
Marmora.....	1,395	517	23,150	1,766,530	438	336	1.31
Martintown.....	415	121	5,187	295,920	97	254	1.75
◆Massey.....	1,176	358	26,345	1,160,701	343	.....	.....
†Matachewan Twp.....	817	223	9,278	648,744	178	304	1.43
†Matheson.....	859	292	17,113	1,436,289	231	518	1.19
◆†Mattawa.....	3,197	771	48,564	2,676,334	656	.....	.....
Maxville.....	831	306	11,363	924,505	247	312	1.23

† Local system

◆ New municipal resale rate structure

◆ and with small commercial customers transferred to domestic billing

§ Estimated

\* Included with Sandwich West Twp. effective January 1, 1959

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
4,993	308,679	48	536	1.62	5,421	391,147	7	173	4,657	1.39
2,212	93,590	10	780	2.36	878	36,600	1	18	3,050	2.40
59,584	3,503,150	179	1,631	1.70	7,671	402,558	30	362	1,118	1.91
3,412	147,931	14	881	2.31	525	23,303	1	15	1,942	2.25
16,705	916,139	105	727	1.82	26,218	1,892,084	16	807	9,855	1.39
19,095	1,091,887	84	1,083	1.75	35,194	2,773,622	22	1,025	10,506	1.27
2,273	102,641	20	428	2.21						
599,789	50,904,067	1,833	2,314	1.18	368,153	36,943,769	243	12,779	12,669	1.00
25,601	1,599,163	112	1,190	1.60	22,598	1,461,171	35	1,018	3,479	1.55
1,799	44,907	22	170	4.01						
154,614	10,661,161	793	1,120	1.45	61,622	4,777,109	117	1,713	3,402	1.29
602,022	37,984,122	1,663	1,903	1.58	1,277,773	120,639,831	363	36,365	27,695	1.06
16,274	1,028,213	100	857	1.58	6,870	358,798	12	311	2,492	1.91
5,791	232,906	38	511	2.49	1,265	36,400	2	31	1,517	3.47
3,475	212,810	49	362	1.63	2,195	179,580	1	54	14,965	1.22
5,333	338,327	40	705	1.58						
10,058	544,085	64	708	1.85	1,605	157,000	3	30	4,361	1.02
9,667	503,305	30	1,398	1.92	1,876	79,796	5	58	1,330	2.35
2,789	153,856	9			1,776	70,416	1	64		
57,022	3,609,841	182	1,653	1.58	108,944	11,368,399	68	2,981	13,932	0.96
78,676	4,890,912	199			114,762	12,915,153	86	3,460		
32,050	1,916,758	120	1,331	1.67	41,320	2,777,901	32	1,315	7,234	1.49
868,871	63,469,066	2,808	1,884	1.37	1,218,129	140,295,075	425	41,021	27,509	0.87
5,950	345,716	17	1,695	1.72	8,808	857,364	6	261	11,908	1.03
54,839	3,679,567	**126			71,059	6,269,761	43	2,400		
3,993	254,645	15	1,415	1.57	1,439	45,936	3	64	1,276	3.13
9,289	431,787	67	537	2.15	2,766	156,640	5	83	2,611	1.77
8,615	448,440	95	393	1.92	8,092	383,015	11	241	2,902	2.11
2,373	121,995	18	565	1.95	2,097	45,755	2	98	1,906	4.58
18,236	939,780	122	642	1.94	5,877	244,641	10	172	2,039	2.40
3,179	98,960	23	359	3.21						
11,272	676,000	87	648	1.67	2,240	127,730	8	87	1,331	1.75
27,268	1,548,240	125	1,032	1.76	14,913	756,829	23	536	2,742	1.97
15,149	776,350	75	863	1.95	2,290	131,600	4	66	2,742	1.74
3,063	114,785	23	416	2.67	722	12,300	1	33	1,025	5.87
8,085	274,903	10			1,785	85,677	5	38		
5,473	224,634	45	416	2.44						
12,466	685,865	57	1,003	1.82	2,811	214,523	4	68	4,469	1.31
38,719	1,453,106	109			19,669	973,370	6	437		
7,158	335,630	56	499	2.13	4,532	104,000	3	120	2,889	4.36

\*\* Small commercial customers transferred to domestic billing



# Municipal Electrical CUSTOMERS, REVENUE, for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
McGarry.....	3,007	499	34,175	2,735,400	432	528	1.25
Meaford.....	3,640	1,481	62,052	5,650,852	1,256	375	1.10
Merlin.....	524	247	6,825	479,459	181	221	1.42
Merrickville.....	882	350	14,749	998,660	297	280	1.48
Merritton.....	5,842	1,798	93,667	7,792,680	1,622	400	1.20
◆Midland.....	8,348	2,776	122,227	12,875,980	2,581	416	0.95
Mildmay.....	844	306	11,568	1,053,550	233	377	1.10
Millbrook.....	805	317	15,535	1,161,155	253	382	1.34
◆Milton.....	4,915	1,633	110,503	8,223,984	1,504		
Milverton.....	1,082	457	21,927	1,454,752	349	347	1.51
◆Mimico.....	14,338	5,638	255,747	24,974,820	5,400	385	1.02
◆Mitchell.....	2,174	873	48,151	3,509,100	785		
◆Moorefield.....	309	127	4,196	358,790	113		
Morrisburg.....	2,003	750	39,530	3,609,230	620	485	1.10
◆Mount Brydges.....	901	336	11,953	792,901	314	210	1.51
◆Mount Forest.....	2,414	948	45,419	3,962,760	854	387	1.15
Napanee.....	4,473	1,655	81,332	7,749,771	1,362	474	1.05
◆Neustadt.....	495	201	5,716	561,450	183	256	1.02
Newboro.....	296	138	5,087	238,377	120	166	2.13
Newburgh.....	565	183	8,974	558,920	156	299	1.61
Newbury.....	342	132	4,417	260,940	110	198	1.69
Newcastle.....	1,134	450	18,220	1,637,695	372	367	1.11
New Hamburg.....	2,030	687	37,469	2,918,475	553	440	1.28
◆†New Liskeard.....	4,462	1,546	97,637	7,485,494	1,381	452	1.30
Newmarket.....	7,629	2,513	144,149	13,500,070	2,159	521	1.07
◆New Toronto.....	10,646	3,768	202,670	17,798,834	3,476	427	1.14
Niagara.....	2,713	1,057	67,949	6,234,861	918	566	1.09
◆Niagara Falls.....	23,858	7,506	388,416	32,021,134	6,904	387	1.21
Nipigon Twp.....	2,682	711	37,058	3,324,050	589	470	1.11
North Bay.....	22,552	6,983	419,584	37,274,383	5,845	531	1.13
North York Twp.....	197,546	66,807	4,587,300	405,993,963	61,207	553	1.13
Norwich.....	1,638	669	35,003	2,703,773	552	408	1.29
Norwood.....	1,048	412	17,033	1,287,720	327	328	1.32
Oakville.....	10,156	3,486	182,763	13,746,595	2,840	403	1.33
Oil Springs.....	482	224	5,253	357,077	150	198	1.47
Omeme.....	838	297	12,882	1,009,330	254	331	1.28
◆Orangeville.....	4,522	1,616	88,137	7,499,650	1,457	429	1.18
Orillia.....	14,088	5,083	233,312	23,760,517	4,306	460	0.98
Orono.....	806	348	16,563	1,153,471	300	320	1.44
◆Oshawa.....	54,896	17,651	846,743	103,974,318	15,988	542	0.81

† Local system

◆ New municipal resale rate structure with small commercial customers transferred to domestic billing

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
14,527	782,857	63	1,036	1.86	2,420	180,110	4	50	3,752	1.34
29,237	1,960,480	193	846	1.49	33,536	2,216,324	32	1,030	5,772	1.51
7,353	411,437	62	553	1.79	2,488	79,424	4	75	1,655	3.13
4,558	231,080	47	410	2.02	3,554	292,336	6	128	4,060	1.22
33,947	1,751,000	147	993	1.94	545,203	72,325,443	29	14,406	207,832	0.75
44,790	3,576,264	135	2,208	1.25	128,300	13,192,682	60	5,854	18,323	0.97
6,051	325,590	65	417	1.86	3,731	238,370	8	121	2,483	1.57
7,653	250,816	62	337	3.05	770	34,740	2	16	1,448	2.22
36,440	1,729,699	96	.....	.....	92,941	7,180,035	33	2,379	.....	.....
14,300	576,039	92	522	2.48	11,824	620,784	16	371	3,233	1.90
73,796	5,453,184	168	2,705	1.35	64,665	5,059,577	70	2,259	6,023	1.28
20,563	869,942	64	.....	.....	27,986	1,948,071	24	731	.....	.....
2,778	158,155	12	.....	.....	1,474	69,750	2	49	.....	.....
23,029	1,258,196	117	896	1.83	10,924	696,095	13	386	4,462	1.57
3,223	146,170	19	641	2.20	2,678	125,700	3	114	3,492	2.13
19,041	1,242,680	67	1,546	1.53	14,666	979,354	27	507	3,023	1.50
55,789	3,303,357	263	1,047	1.69	31,952	2,726,828	30	1,202	7,575	1.17
1,225	73,210	16	381	1.67	2,041	148,440	2	91	6,185	1.38
1,782	60,420	18	280	2.95	.....	.....	.....	.....	.....	.....
3,464	129,860	24	451	2.67	3,335	172,300	3	95	4,786	1.94
1,386	67,610	21	268	2.05	249	5,110	1	12	426	4.88
11,808	720,750	67	896	1.64	9,779	743,604	11	275	5,633	1.32
16,308	810,118	116	582	2.01	19,698	1,250,904	18	547	5,791	1.57
54,172	3,237,929	129	2,092	1.67	47,329	3,277,848	36	1,171	7,588	1.44
89,883	5,766,496	304	1,581	1.56	58,044	4,575,505	50	1,889	7,626	1.27
84,351	6,320,887	207	2,545	1.33	733,171	93,247,477	85	21,585	91,419	0.79
23,416	1,330,584	124	894	1.76	6,327	303,232	15	242	1,685	2.09
302,761	24,385,042	547	3,715	1.24	237,822	23,854,910	55	7,375	36,144	1.00
27,176	2,100,055	112	1,563	1.29	11,011	1,158,698	10	358	9,656	0.95
247,912	18,389,518	1,011	1,516	1.35	128,046	10,879,139	127	3,839	7,139	1.18
1,758,586	104,528,975	4,719	1,846	1.68	1,287,499	124,117,049	881	42,027	11,740	1.04
15,225	717,687	106	564	2.12	5,405	273,480	11	175	2,072	1.98
9,502	407,675	80	425	2.33	5,218	201,070	5	166	3,351	2.60
148,563	7,927,638	543	1,217	1.87	172,124	17,276,645	103	5,555	13,978	1.00
2,801	110,432	40	230	2.54	6,812	626,315	34	142	1,535	1.09
4,557	178,287	38	391	2.56	3,549	226,548	5	83	3,776	1.57
30,874	1,983,888	118	1,401	1.56	16,097	1,006,215	41	772	2,045	1.60
140,781	10,774,537	648	1,386	1.31	277,416	27,480,084	129	10,910	17,752	1.01
5,999	278,226	45	515	2.16	2,327	90,926	3	67	2,526	2.56
340,473	28,227,664	1,420	1,657	1.21	1,148,928	144,062,720	243	36,963	49,404	0.80

Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
◆Ottawa (including Eastview and Rockcliffe Park).....	258,443	80,521	3,923,818	503,587,808	70,169	598	0.78
Otterville.....	704	276	12,087	996,078	224	371	1.21
◆Owen Sound.....	17,506	5,987	306,995	28,531,519	5,559	428	1.08
Paisley.....	770	321	12,362	929,390	248	312	1.33
Palmerston.....	1,555	607	27,655	2,518,468	493	426	1.10
Paris.....	5,655	1,933	94,704	6,964,602	1,673	347	1.36
◆Parkhill.....	1,007	490	24,062	1,734,016	439	329	1.39
Parry Sound.....	5,867	1,954	88,397	8,085,227	1,655	407	1.09
Penetanguishene.....	4,658	1,365	59,564	5,178,838	1,180	366	1.15
Perth.....	5,408	1,932	80,357	7,772,456	1,607	403	1.03
Peterborough.....	44,720	14,202	829,567	85,604,987	12,597	566	0.97
Petrolia.....	3,566	1,245	43,334	2,572,077	1,037	207	1.68
◆Pickering ■.....	1,606	478	14,934	1,030,740	447	.....	.....
†Pickle Lake Landing Townsite.....	\$140	84	4,411	225,888	61	309	1.95
◆Picton.....	4,976	1,906	95,596	8,616,900	1,573	457	1.11
◆Plattsville.....	478	188	9,358	704,441	175	.....	.....
◆Point Edward.....	2,760	813	26,827	2,181,700	746	244	1.23
Port Arthur.....	40,250	12,818	660,399	78,363,720	11,211	582	0.84
◆Port Burwell.....	722	439	16,710	597,128	412	121	2.80
◆†Port Carling.....	*480	495	22,428	1,121,873	426	.....	.....
Port Colborne.....	14,750	4,570	178,863	13,652,750	3,982	286	1.31
Port Credit.....	6,350	2,596	144,795	12,183,261	2,248	452	1.19
◆Port Dalhousie.....	3,383	1,113	90,962	6,609,820	1,054	523	1.38
Port Dover.....	2,848	1,447	43,296	3,075,731	1,217	211	1.41
Port Elgin.....	1,719	1,035	43,825	2,879,927	852	282	1.52
◆Port Hope.....	7,690	2,740	172,695	14,690,299	2,555	479	1.18
Port McNicoll.....	997	464	15,028	1,090,451	432	210	1.38
◆Port Perry.....	2,212	805	41,856	3,600,450	757	396	1.16
Port Rowan.....	793	331	8,104	479,210	253	158	1.69
◆Port Stanley.....	*1,415	1,138	43,714	3,259,488	1,076	252	1.34
◆†Powassan.....	978	324	19,943	1,459,794	306	.....	.....
◆Prescott.....	5,373	1,720	87,714	8,696,692	1,599	453	1.01
Preston.....	10,593	3,128	186,721	13,574,680	2,735	414	1.38
◆Priceville.....	163	64	2,425	95,680	56	.....	.....
Princeton.....	428	168	7,815	661,947	130	424	1.18
Queenston.....	425	152	10,485	1,009,006	136	618	1.04
◆†Rainy River.....	1,290	451	15,538	484,480	419	.....	.....
†Red Lake Townsite.....	1,916	903	48,572	2,673,589	715	312	1.82
Red Rock.....	1,885	329	22,281	2,185,384	301	605	1.02
◆Renfrew.....	8,500	2,617	145,547	11,086,527	2,246	411	1.31

† Local system  
◆ New municipal resale rate structure  
◆ and with small commercial customers transferred to domestic billing  
‡ 5 months' operation  
■ 6 months' operation  
\* Excluding summer population  
§ Estimated

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
4,209,585	339,344,940	10,143	2,788	1.24	583,235	50,707,385	209	20,243	20,218	1.15
4,246	214,197	44	406	1.98	2,359	111,123	8	73	1,158	2.12
115,543	8,361,793	296	2,354	1.38	136,766	11,435,904	132	5,556	7,220	1.20
7,014	342,700	64	446	2.05	3,314	207,530	9	88	1,922	1.60
12,255	757,196	96	657	1.62	12,427	1,020,225	18	500	4,723	1.22
29,635	1,952,385	220	740	1.52	52,626	4,339,479	40	2,117	9,041	1.21
10,507	541,803	39	1,158	1.94	6,427	374,976	12	214	2,604	1.71
53,088	2,892,761	278	867	1.84	15,044	1,086,323	21	525	4,311	1.38
27,160	1,746,474	165	882	1.56	38,875	3,754,415	20	1,303	15,643	1.04
39,711	2,851,380	275	864	1.39	36,748	3,254,790	50	1,607	5,425	1.13
387,729	24,462,789	1,368	1,490	1.58	563,703	69,676,468	237	19,063	24,499	0.81
29,082	1,339,205	170	656	2.17	37,408	1,625,959	38	871	3,566	2.30
2,884	194,856	28	.....	.....	1,911	180,810	3	153	.....	.....
2,135	72,530	23	263	2.94	194	.....	.....	13	.....	.....
53,096	3,559,597	289	1,026	1.49	18,693	1,895,471	44	803	3,590	0.99
1,697	65,074	11	.....	.....	16,843	1,421,450	2	441	.....	.....
10,524	691,300	45	1,280	1.52	109,762	8,878,200	22	3,493	33,630	1.24
339,193	31,207,007	1,435	1,812	1.09	578,282	64,384,989	172	25,015	31,194	0.90
4,014	170,982	24	594	2.35	698	7,160	3	50	199	9.75
13,873	526,916	64	.....	.....	1,146	77,970	5	43	.....	.....
96,609	5,235,761	512	852	1.85	74,640	6,129,889	76	2,507	6,721	1.22
67,456	4,069,161	301	1,127	1.66	292,069	42,625,291	47	6,524	75,577	0.69
9,897	579,678	43	1,123	1.71	13,375	725,573	16	342	3,779	1.84
25,475	1,580,736	198	665	1.61	38,502	3,415,732	32	1,349	8,895	1.13
21,858	996,758	168	494	2.19	12,733	646,394	15	355	3,591	1.97
52,487	3,201,293	138	1,933	1.64	178,199	17,015,871	47	4,465	30,170	1.05
3,042	142,410	30	396	2.14	32,062	1,662,700	2	913	69,279	1.93
9,493	622,925	37	1,403	1.52	5,105	372,063	11	185	2,819	1.37
8,124	405,870	73	463	2.00	1,054	25,081	5	33	418	4.20
9,698	583,392	46	1,057	1.66	8,334	401,915	16	373	2,093	2.07
10,114	462,483	15	.....	.....	864	24,066	3	28	.....	.....
24,613	1,652,235	82	1,679	1.49	38,383	3,248,677	39	1,437	6,942	1.18
58,570	3,100,358	294	879	1.89	228,353	17,261,570	99	7,242	14,530	1.32
861	33,125	8	.....	.....	.....	.....	.....	.....	.....	.....
2,757	131,470	35	313	2.10	1,527	57,785	3	59	1,605	2.64
5,580	339,445	16	1,768	1.64	.....	.....	.....	.....	.....	.....
4,878	154,858	25	.....	.....	1,734	88,682	7	90	.....	.....
46,850	2,138,970	181	985	2.19	8,432	364,040	7	195	4,334	2.32
16,053	1,037,062	26	3,324	1.55	1,401	163,410	2	41	6,809	0.86
55,333	3,734,222	306	1,017	1.48	81,303	6,454,116	65	3,004	8,275	1.26



Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Richmond.....	916	277	16,635	1,204,402	250	401	1.38
◆ Richmond Hill.....	14,191	4,190	295,120	20,979,259	3,850	454	1.41
Ridgetown.....	2,468	1,004	28,313	1,905,524	815	195	1.49
◆ Ripley.....	448	215	9,941	725,710	195	310	1.37
◆ Riverside.....	15,559	4,953	252,982	17,533,838	4,814	304	1.44
◆ Rockland.....	2,842	679	35,223	2,278,721	651	.....	.....
Rockwood.....	860	295	16,694	1,158,110	246	392	1.44
Rodney.....	1,025	434	11,047	846,905	352	200	1.30
Rosseau.....	207	121	3,867	187,885	106	148	2.06
◆ Russell.....	562	200	8,166	777,027	183	354	1.05
St. Catharines.....	41,156	13,663	738,629	59,421,184	11,846	418	1.24
◆ St. Clair Beach.....	1,125	410	28,791	1,732,216	394	.....	.....
St. George.....	732	275	9,210	839,193	222	315	1.10
St. Jacobs.....	722	233	11,802	968,717	182	444	1.22
◆ St. Mary's.....	4,266	1,594	93,130	7,710,361	1,453	442	1.21
St. Thomas.....	19,503	6,870	348,908	27,096,449	6,055	373	1.29
◆ Sandwich East Twp.....	21,289	5,965	345,911	15,411,175	5,747	223	2.24
◆ Sandwich West Twp.....	22,074	6,435	454,169	23,217,182	6,116	316	1.96
◆ Sarnia.....	46,913	14,319	646,917	50,090,033	13,396	312	1.29
Scarborough Twp.....	168,281	54,338	3,796,172	294,113,177	50,632	484	1.29
◆ Schreiber Twp.....	2,042	617	32,730	3,484,805	578	.....	.....
◆ Seaforth.....	2,202	810	38,394	3,192,580	717	.....	.....
Shelburne.....	1,274	551	24,962	1,786,565	432	345	1.40
Simcoe.....	8,279	3,113	107,640	9,065,932	2,517	300	1.19
Sioux Lookout.....	2,311	927	64,311	4,327,619	783	461	1.49
Smith's Falls.....	8,917	3,252	151,941	15,758,092	2,788	471	0.96
Smithville.....	825	379	11,988	838,104	283	247	1.43
Southampton.....	1,777	1,078	35,488	2,610,677	939	232	1.36
† South Porcupine Townsite.....	\$5,600	1,771	79,903	5,385,113	1,498	300	1.48
Springfield.....	551	178	7,258	577,840	148	325	1.26
Stamford Twp.....	28,476	8,587	538,562	45,285,717	8,013	471	1.19
Stayner.....	1,539	613	28,503	2,173,160	489	370	1.31
Stirling.....	1,306	504	26,430	2,094,030	401	435	1.26
◆ Stoney Creek.....	5,859	1,829	124,855	11,113,767	1,742	532	1.12
Stouffville.....	2,652	922	50,194	4,328,220	786	459	1.16
Stratford.....	20,532	6,871	416,786	34,917,031	6,100	477	1.19
Strathroy.....	4,719	1,678	78,508	7,292,220	1,397	435	1.08
Streetsville.....	3,766	1,357	84,932	6,139,787	1,206	424	1.38
◆ Sturgeon Falls.....	6,213	1,541	81,778	5,827,915	1,434	339	1.40
Sudbury.....	47,773	15,594	979,314	83,651,277	13,818	504	1.17

† Local system  
◆ New municipal resale rate structure  
◆ and with small commercial customers transferred to domestic billing  
\$ Estimated

**Utilities and Local Systems**  
**AND CONSUMPTION**  
**December 31, 1958**

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
3,479	149,070	25	497	2.33	3,119	201,000	2	65	8,375	1.55
68,411	3,904,297	291	1,118	1.75	65,610	4,938,715	49	1,706	8,399	1.33
25,855	1,395,345	160	727	1.85	24,371	1,353,630	29	775	3,890	1.80
2,691	147,750	17	724	1.82	2,064	134,625	3	62	3,740	1.53
34,796	2,216,194	110	1,679	1.57	26,319	1,392,590	29	1,071	4,002	1.89
11,495	526,188	25	.....	.....	1,639	162,130	3	56	.....	.....
5,331	235,850	46	427	2.26	1,841	80,240	3	46	2,229	2.29
7,005	392,297	71	460	1.79	7,106	269,989	11	246	2,045	2.63
2,070	80,340	15	446	2.58	.....	.....	.....	.....	.....	.....
2,071	132,330	14	788	1.57	632	38,420	3	35	1,067	1.65
428,394	25,029,424	1,553	1,343	1.71	1,044,722	105,911,502	264	30,179	33,432	0.99
5,868	243,025	11	.....	.....	2,225	71,245	5	64	.....	.....
5,890	405,116	47	718	1.45	6,592	439,236	6	222	6,101	1.50
6,265	304,800	42	605	2.06	5,771	239,700	9	228	2,219	2.41
22,003	1,350,286	93	1,210	1.63	248,941	36,861,595	48	6,138	63,996	0.68
159,833	11,457,980	713	1,339	1.39	254,797	27,362,830	102	8,394	22,355	0.93
66,185	2,814,324	157	1,494	2.35	110,079	5,246,753	61	2,496	7,168	2.10
126,096	6,184,638	270	1,909	2.04	99,063	5,555,803	49	2,151	9,449	1.78
301,608	20,819,246	773	2,244	1.45	1,309,477	191,239,206	150	30,434	106,244	0.68
1,016,846	61,426,153	3,174	1,613	1.66	1,461,202	141,962,865	532	42,237	22,237	1.03
10,869	831,439	36	.....	.....	3,911	426,860	3	111	.....	.....
22,249	1,238,385	75	.....	.....	18,509	1,386,627	18	629	.....	.....
14,788	767,684	107	598	1.93	7,098	355,510	12	266	2,469	2.00
100,814	6,802,995	507	1,118	1.48	142,322	14,191,872	89	4,576	13,288	1.00
31,137	1,178,267	126	779	2.64	12,774	1,065,172	18	279	4,931	1.20
73,876	5,567,562	409	1,134	1.33	63,220	5,666,339	55	2,405	8,585	1.12
9,140	417,613	82	424	2.19	11,316	480,069	14	390	2,858	2.36
16,547	784,701	124	527	2.11	16,254	972,430	15	477	5,402	1.67
32,696	1,824,637	233	653	1.79	8,259	587,705	40	304	1,224	1.41
2,576	138,759	27	428	1.86	2,378	64,476	3	93	1,791	3.69
168,254	7,841,080	494	1,323	2.15	149,047	13,810,122	80	4,277	14,386	1.08
14,239	729,750	108	563	1.95	5,518	334,190	16	192	1,741	1.65
11,400	573,406	88	543	1.99	5,856	347,665	15	209	1,931	1.68
28,812	2,072,059	68	2,539	1.39	15,533	1,325,447	19	428	5,813	1.17
24,561	1,376,449	123	933	1.78	11,046	522,413	13	330	3,349	2.11
159,901	10,177,050	624	1,359	1.57	216,731	20,083,099	147	7,365	11,385	1.08
40,818	2,657,766	229	967	1.54	50,781	3,840,757	52	1,893	6,155	1.32
23,736	1,285,690	123	871	1.85	32,556	2,863,133	28	950	8,521	1.14
34,597	1,944,375	90	1,800	1.78	5,523	378,915	17	178	1,857	1.46
503,124	29,461,423	1,572	1,562	1.71	166,150	12,942,633	204	4,930	5,287	1.28

Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Sunderland.....	575	252	10,804	846,300	203	347	1.28
Sundridge.....	753	293	12,944	715,820	231	258	1.81
Sutton.....	1,395	866	29,583	2,321,323	709	273	1.27
◆Swansea.....	8,972	3,233	184,084	17,368,600	2,989	.....	.....
◆Tara.....	496	233	8,987	703,450	212	.....	.....
Tavistock.....	1,169	495	26,789	2,027,400	385	439	1.32
◆Tecumseh.....	4,401	1,318	57,078	3,489,961	1,258	231	1.64
◆Teeswater.....	856	339	13,480	1,147,098	305	313	1.18
◆Terrace Bay.....	1,820	412	31,893	4,256,656	385	921	0.75
Thamesford.....	771	313	20,523	1,312,140	260	421	1.56
◆Thamesville.....	1,020	436	14,845	929,241	387	200	1.60
Thedford.....	723	296	11,309	828,098	229	301	1.37
◆Thessalon.....	1,742	511	26,893	1,413,344	426	276	1.90
Thornbury.....	1,112	512	21,362	1,348,185	407	276	1.58
◆Thorndale.....	428	133	8,792	569,589	124	383	1.54
†Thornloe.....	188	35	1,961	120,155	24	417	1.63
Thornton.....	295	100	4,862	347,670	89	326	1.40
Thorold.....	8,272	2,524	121,341	10,328,650	2,250	383	1.17
◆Tilbury.....	2,944	1,005	34,646	2,148,236	898	199	1.61
†Tillsonburg.....	6,370	2,402	101,915	7,175,831	1,939	308	1.42
†Timmins (including Schumacher)...	\$31,025	9,356	500,536	37,343,366	8,047	387	1.34
Toronto (including Leaside).....	662,401	204,294	11,461,317	917,181,240	170,167	449	1.25
◆Toronto Twp.....	53,219	14,042	997,262	82,971,098	13,035	530	1.20
Tottenham.....	732	272	12,454	1,043,380	213	408	1.19
◆Trafalgar Twp.....	25,107	5,588	509,470	35,038,611	5,467	.....	.....
Trenton.....	12,105	3,894	172,839	21,513,921	3,427	523	0.80
◆Tweed.....	1,642	602	21,447	2,490,950	541	384	0.86
◆Uxbridge.....	2,236	845	39,491	3,687,863	761	404	1.07
Vankleek Hill.....	1,670	529	23,877	1,262,511	449	234	1.89
Victoria Harbour.....	951	462	15,918	875,385	422	173	1.82
◆Walkerton.....	3,717	1,258	56,748	4,788,665	1,147	.....	.....
◆Wallaceburg.....	7,997	2,742	85,406	6,184,591	2,453	.....	.....
Wardsville.....	330	135	4,410	314,721	106	247	1.40
Warkworth.....	527	237	8,876	587,680	183	268	1.51
◆Wasaga Beach.....	*440	981	26,276	990,200	776	106	2.65
Waterdown.....	1,828	576	37,631	3,070,861	489	523	1.23
◆Waterford.....	2,040	755	33,299	2,408,207	727	276	1.38
Waterloo.....	18,317	5,758	360,294	33,467,941	5,233	533	1.08
Watford.....	1,210	523	22,892	1,775,486	409	362	1.29
Waubashene.....	\$1,200	428	12,910	694,650	393	147	1.86

† Local system  
◆ New municipal resale rate structure  
◆ and with small commercial customers transferred to domestic billing  
\* Excluding summer population  
§ Estimated

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1958

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
5,220	241,115	45	447	2.16	4,494	207,070	4	98	4,314	2.17
9,674	339,615	59	480	2.85	1,500	53,860	3	35	1,496	2.79
20,026	1,130,299	146	645	1.77	5,407	299,938	11	171	2,272	1.80
46,974	3,208,194	196	.....	.....	61,618	6,384,789	48	2,010	.....	.....
2,979	147,400	14	.....	.....	2,356	168,264	7	70	.....	.....
10,119	479,529	102	392	2.11	10,860	541,585	8	335	5,642	2.01
12,035	689,674	46	1,249	1.74	7,788	523,873	14	264	3,118	1.49
4,550	270,036	27	833	1.68	9,861	826,058	7	298	9,834	1.19
14,018	1,213,716	25	4,046	1.15	6,439	622,000	2	196	25,917	1.04
8,539	380,688	48	661	2.24	5,441	293,241	5	130	4,887	1.86
7,292	396,580	32	1,033	1.84	16,331	772,937	17	504	3,789	2.11
6,693	314,091	62	422	2.13	3,247	295,217	5	78	4,920	1.10
18,912	806,515	78	862	2.34	2,401	216,417	7	59	2,576	1.11
10,128	426,700	88	404	2.37	9,632	618,860	17	386	3,034	1.56
818	32,340	6	449	2.53	2,226	77,244	3	63	2,146	2.88
1,354	54,760	11	415	2.47	.....	.....	.....	.....	.....	.....
1,049	39,711	11	301	2.64	.....	.....	.....	.....	.....	.....
44,580	2,673,789	233	956	1.67	314,650	44,759,844	41	8,584	90,975	0.70
23,384	1,349,900	84	1,339	1.73	22,075	904,015	23	873	3,275	2.44
98,563	5,345,375	414	1,076	1.84	62,199	4,896,938	49	1,835	8,328	1.27
233,941	14,923,392	1,165	1,067	1.57	57,618	2,814,872	144	1,358	1,629	2.05
9,036,649	608,792,670	27,592	1,839	1.48	13,502,227	1,329,533,505	6,535	368,450	16,954	1.02
296,615	19,849,908	874	1,893	1.49	1,407,891	175,328,890	133	32,572	109,855	0.80
4,733	230,809	53	363	2.05	2,417	164,721	6	67	2,288	1.47
61,924	2,533,365	78	.....	.....	183,910	15,663,064	43	4,237	.....	.....
77,255	7,020,288	383	1,527	1.10	312,949	48,326,611	84	10,192	47,943	0.65
8,250	656,035	46	1,188	1.26	6,373	623,300	15	298	3,463	1.02
11,746	741,215	61	1,013	1.58	20,556	1,008,411	23	736	3,654	2.04
11,660	399,571	71	469	2.92	3,820	92,705	9	148	858	4.12
3,552	152,695	39	326	2.33	332	28,000	1	6	2,333	1.19
29,799	1,737,702	92	.....	.....	28,605	2,307,353	19	915	.....	.....
59,503	3,924,412	199	.....	.....	271,969	29,400,078	90	7,716	.....	.....
4,267	225,271	29	647	1.89	.....	.....	.....	.....	.....	.....
4,632	171,360	54	264	2.70	.....	.....	.....	.....	.....	.....
22,303	914,870	204	374	2.44	994	44,000	1	25	3,667	2.26
10,497	543,039	70	646	1.93	4,139	242,880	17	150	1,191	1.70
7,913	414,840	18	1,921	1.91	9,294	425,460	10	340	3,546	2.18
126,305	7,435,843	420	1,475	1.70	236,523	20,478,991	105	6,905	16,253	1.15
13,827	696,850	102	569	1.98	19,677	1,326,991	12	604	9,215	1.48
3,186	149,308	32	389	2.13	2,806	105,401	3	68	2,928	2.66



Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Webbwood.....	540	140	8,772	295,465	115	214	2.97
Welland.....	17,559	5,269	179,339	14,737,728	4,515	272	1.22
Wellesley.....	677	274	13,006	908,173	217	349	1.43
◆Wellington.....	1,009	530	15,774	1,584,084	491	269	1.00
West Ferris Twp.....	4,307	1,624	104,672	6,488,531	1,453	372	1.61
West Lorne.....	1,078	418	14,886	969,035	327	247	1.54
Weston.....	9,485	3,263	188,550	16,891,837	2,829	498	1.12
Westport.....	710	285	10,383	835,980	223	312	1.24
Wheatley.....	1,250	471	17,530	1,136,360	374	253	1.54
Whitby.....	10,543	3,529	176,202	16,271,129	3,158	429	1.08
◆†White River .....	401	193	8,154	282,149	178	.....	.....
◆Warton.....	1,953	754	30,296	2,858,594	676	352	1.06
Williamsburg.....	340	153	4,310	494,750	110	375	0.87
Winchester.....	1,348	533	22,152	1,775,358	431	343	1.24
Windermere.....	*129	119	5,153	244,956	104	196	2.10
◆Windsor.....	119,319	37,057	1,404,477	124,367,652	34,199	303	1.13
◆Wingham.....	2,677	1,019	50,598	4,834,405	903	.....	.....
Woodbridge.....	2,129	748	47,763	3,985,531	622	534	1.20
◆Woodstock.....	18,852	6,429	387,481	31,341,545	5,947	439	1.24
Woodville.....	409	187	7,703	483,660	149	271	1.59
◆Wyoming.....	813	318	8,720	531,760	256	173	1.64
◆York Twp.....	119,966	38,872	1,944,115	204,934,612	37,390	457	0.95
Zurich.....	624	287	12,746	857,240	230	311	1.49

† Local system, 9 months' operation  
◆ New municipal resale rate structure with small commercial customers transferred to domestic billing  
\* Excluding summer population

**Utilities and Local Systems**  
**AND CONSUMPTION**  
**December 31, 1958**

COMMERCIAL SERVICE (Including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
5,604	167,620	23	607	3.34	841	45,280	2	23	1,887	1.86
149,542	9,537,458	620	1,282	1.57	342,780	34,160,062	134	10,299	21,244	1.00
5,445	265,693	50	443	2.05	2,485	111,720	7	79	1,330	2.22
3,413	225,330	20	939	1.51	4,887	247,500	19	245	1,086	1.97
44,846	2,136,599	161	1,106	2.10	27,229	3,087,510	10	638	25,729	0.88
11,148	496,013	78	530	2.25	27,361	1,853,045	13	649	11,878	1.48
123,998	8,279,076	359	1,922	1.50	133,069	12,755,717	75	4,270	14,173	1.04
8,282	413,711	61	565	2.00	55	680	1	8	57	8.02
17,468	810,095	82	823	2.16	14,840	695,320	15	443	3,863	2.13
66,409	4,054,991	319	1,059	1.64	213,715	23,229,000	52	6,077	37,226	0.92
5,588	297,088	15								
14,808	963,591	62	1,295	1.54	10,981	812,830	16	359	4,233	1.35
3,763	257,080	42	510	1.46	253	14,650	1	6	1,221	1.73
13,766	859,071	93	770	1.60	16,908	1,614,260	9	440	14,947	1.05
3,672	131,040	15	728	2.80						
775,311	58,314,145	2,108	2,305	1.33	1,820,952	162,032,552	750	61,794	18,004	1.12
20,809	1,268,850	82			35,872	2,428,509	34	1,262		
19,720	1,032,975	111	776	1.91	41,528	3,875,695	15	1,221	21,532	1.07
129,837	8,516,649	347	2,045	1.52	353,451	36,368,605	135	10,669	22,450	0.97
3,227	120,216	36	278	2.68	1,369	39,890	2	41	1,662	3.43
5,716	309,547	55	469	1.85	9,667	299,440	7	254	3,565	3.23
405,922	32,976,279	1,052	2,612	1.23	578,976	59,684,786	430	20,881	11,567	0.97
7,201	292,136	54	451	2.47	1,048	42,100	3	28	1,169	2.49

## LIST OF ABBREVIATIONS

acsr	—aluminum conductor steel-reinforced	min	—minimum
cfs	—cubic feet per second		—minute (20-min)
G.S.	—Generating Station	mm.	—millimetre
hp	—horsepower	N.O.P.	—Northern Ontario Properties
Jct.	—Junction	NPD	—Nuclear Power Demonstration
kv	—kilovolt(s)	psi	—pounds per square inch
kva	—kilovolt-ampere(s)	R.O.A.	—Rural Operating Area
kvar	—kilovar(s)	rpm	—revolutions per minute
kw	—kilowatt(s)	S.O.S.	—Southern Ontario System
kwh	—kilowatt-hour(s)	S.S.	—Switching Station
mcm	—thousand circular mils	T.S.	—Transformer Station
M.E.U.	—Municipal Electrical Utilities	Twp.	—Township
		V.A.	—Voted Area

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 C = Statement "C"—Rates and Typical Bills for Electrical Service in Municipal Electrical Utilities and Local Systems  
 D = Statement "D"—Customers, Revenue, and Consumption in Municipal Electrical Utilities and Local Systems  
 L = Statement of Loads of Municipal Electrical Utilities and Local Systems  
 P = Statement of the Allocation of the Cost of Power  
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#### ROYAL VISIT TO ST. LAWRENCE POWER PROJECT

Her Majesty Queen Elizabeth II signs the book commemorating the visit Her Majesty and His Royal Highness the Prince Philip made to the St. Lawrence Power Project on June 27, 1959. Looking on at the right is Mr. James S. Duncan, while immediately behind Her Majesty is the Honourable Richard M. Nixon, Vice-President of the United States.







# The Hydro-Electric Power Commission of Ontario

*Fifty-second*  
**Annual Report**  
*for the Year*  
**1959**

This Report is published pursuant to The Power Commission Act,  
Revised Statutes of Ontario, 1950, Chapter 281, Section 9.

# THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

December 1959

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JAMES S. DUNCAN, C.M.G., LL.D.  
*Chairman*

W. ROSS STRIKE, Q.C.  
*1st Vice-Chairman*

HON. ROBERT W. MACAULAY, Q.C., M.L.A.  
*2nd Vice-Chairman*

LT.-COL. A. A. KENNEDY, D.S.O., E.D.  
*Commissioner*

D. P. CLIFF  
*Commissioner*

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A. W. MANBY, B.Sc.  
*General Manager*

OTTO HOLDEN, B.A.Sc., C.E., D.Eng.  
*Chief Engineer*

ERNEST B. EASSON, B.Com.  
*Secretary*

## LETTER OF TRANSMITTAL

TORONTO, ONTARIO, JULY 4, 1960

THE HONOURABLE JOHN KEILLER MACKAY, D.S.O., V.D., LL.D.

*Lieutenant-Governor of Ontario*

SIR:

I have the honour to present the Annual Report of The Hydro-Electric Power Commission of Ontario for the year ended December 31, 1959.

It was a year of more than usual significance as two remarkable projects were brought to completion in 1959—the program of construction at the St. Lawrence Power Project, which has been a subject of international interest for more than half a century, and the standardization of frequency in the Province at 60 cycles per second, one of the largest operations of its kind ever undertaken. The importance of the St. Lawrence Power Project as an outstanding example of achievement through international co-operation and goodwill was most appropriately marked on June 27 by the visit of Her Majesty Queen Elizabeth II and His Royal Highness the Prince Philip. In the presence of the Honourable Richard M. Nixon, Vice-President of the United States, and a large gathering of distinguished visitors Her Majesty unveiled at the International Boundary an inscription commemorating the international aspect of this project. In that



same month the Commission announced that it would co-operate with Atomic Energy of Canada Limited in the construction and operation of a 200,000-kilowatt nuclear-electric station at Douglas Point on the shore of Lake Huron between Kincardine and Port Elgin. The first two events mark the close of an interesting and colourful period in the Commission's history; the third foreshadows important future developments that will undoubtedly take place in a challenging but still relatively uncharted field of power generation.

The economic recovery that became apparent late in 1958 continued through 1959. The Commission was required by its customers to supply 8.1 per cent more power in December 1959 than in December 1958. The growth in primary power demands to a new maximum of 5,556,500 kilowatts was more than matched by the record amount of power made available by new generating units brought into service during the year.

Gross revenues from the sale of primary power in 1959 amounted to \$214,680,399, which exceeded comparable revenues in 1958 by 8.3 per cent. The cost of providing service at \$211,835,060 in 1959 was 8.8 per cent greater than in 1958. The continuing rise in wages, in the cost of money and materials, and in taxes and tax equivalents had brought the Commission to the point where increases in wholesale rates to customers could be no longer avoided. General increases were postponed in 1959 only by foregoing the regular provision for the reserve for stabilization of rates and contingencies and also by withdrawing \$1,201,009 from reserves for the Northern Ontario Properties. Higher interim rates for power became applicable to municipal electrical utilities on January 1, 1960 and upward revisions have been, or are being made in the rates to direct industrial and other customers. At the retail service level it has been imperative to increase rates for certain summer cottage contracts. The ever-expanding consumption of electric energy has enabled the Commission to leave other rural rates unchanged. Meanwhile, the Commission is seeking every means of keeping costs under control by rescheduling capital construction, reducing inventories, curtailing general expenditure, and increasing automation. In the municipal field, most of the utilities are in a sufficiently favourable financial position that they can absorb the present increase in the cost of their power without the necessity of raising rates to their own customers.

The Commission has continued to develop its organization so that it can meet effectively the challenge of competition from natural gas utilities, which are currently engaged in widespread extension of their operations in Ontario. An effective sales promotion campaign undertaken in conjunction with the associated municipal electrical utilities and the electrical manufacturing industry has reached out with marked success to create and widen public interest in electrical living. For the purpose of increasing the use of electricity, particular emphasis is being given to flat-rate water-heating and the installation of electric heating both for houses and for commercial buildings.

Throughout 1959 the Commission continued to receive from the Ontario Municipal Electric Association and the Association of Municipal Electrical Utilities of Ontario co-operation and assistance in the pursuit of our common

aim, which is to bring to the people of Ontario the maximum benefits of electricity at the lowest cost consistent with reliable and satisfactory service.

I wish to record that Mr. A. W. Manby retired as General Manager at the end of 1959 after thirty-eight years of distinguished service with the Commission. In the five years during which he occupied the post of General Manager, his qualities of leadership and his wide experience contributed greatly to the Hydro organization. He has been succeeded by Mr. J. M. Hambley, Deputy General Manager, whose outstanding abilities have come to be well recognized during his career with the Commission.

I wish also to express sincere appreciation to my colleagues on the Commission who have so ably participated in conducting the affairs of this great corporation during the past year. During that same period the faithful and efficient work of the staff has made possible another successful year for the Hydro enterprise, and the co-operation that prevails at all levels of this complex administration is a tribute to both the executive leadership and the staff in general.

Respectfully submitted,

JAMES S. DUNCAN,

*Chairman.*

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FIFTY-SECOND ANNUAL REPORT  
OF  
**The Hydro-Electric Power Commission  
of Ontario**

---

**FOREWORD**

**T**HE Hydro-Electric Power Commission of Ontario is a corporate entity, a self-sustaining public enterprise endowed with broad powers with respect to electricity supply throughout the Province of Ontario. Its authority is derived from an Act of the Provincial Legislature passed in 1906 to give effect to recommendations of earlier advisory commissions that the water powers of Ontario should be conserved and developed for the benefit of the people of the Province. It now operates under The Power Commission Act (7-Edward VII, c. 19) passed in 1907 as an amplification of the Act of 1906 and subsequently modified from time to time (Revised Statutes of Ontario, 1950, c. 281, as amended).

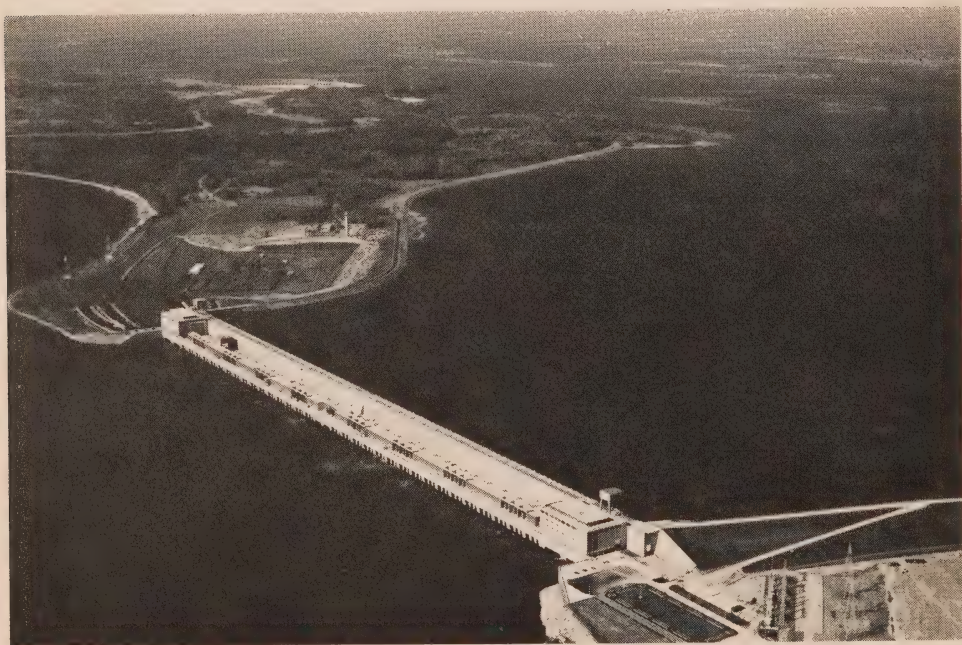
The Commission may have from three to six members, all of whom are appointed by the Lieutenant-Governor in Council. One commissioner must, and a second commissioner may, be a member of the Executive Council of the Province of Ontario. In the conduct of the Commission's affairs, the commissioners are responsible for, and are the final authority in establishing policy.



### **Systems and the Power Supply**

For the financial and administrative purposes of the Commission, the Province is divided into two parts. The roughly triangular part lying south of Lake Nipissing and the French and Mattawa Rivers is served by the Southern Ontario System, a fully integrated power system combining the Niagara, Georgian Bay, and Eastern Ontario Divisions. The system is operated on a co-operative basis predominantly for the benefit of more than three hundred municipal electrical utilities supplied with power at cost, but in part also, for the benefit of the Rural Power District which it serves. The northern part of the Province is served by the Northern Ontario Properties, held and operated for the most part in trust for the Province, but operated in part also for the benefit of a group of utilities supplied with power at cost. The Northern Ontario Properties include a Northeastern and a Northwestern Division. Each of these two divisions is an integrated power system, the former being interconnected with the Southern Ontario System.

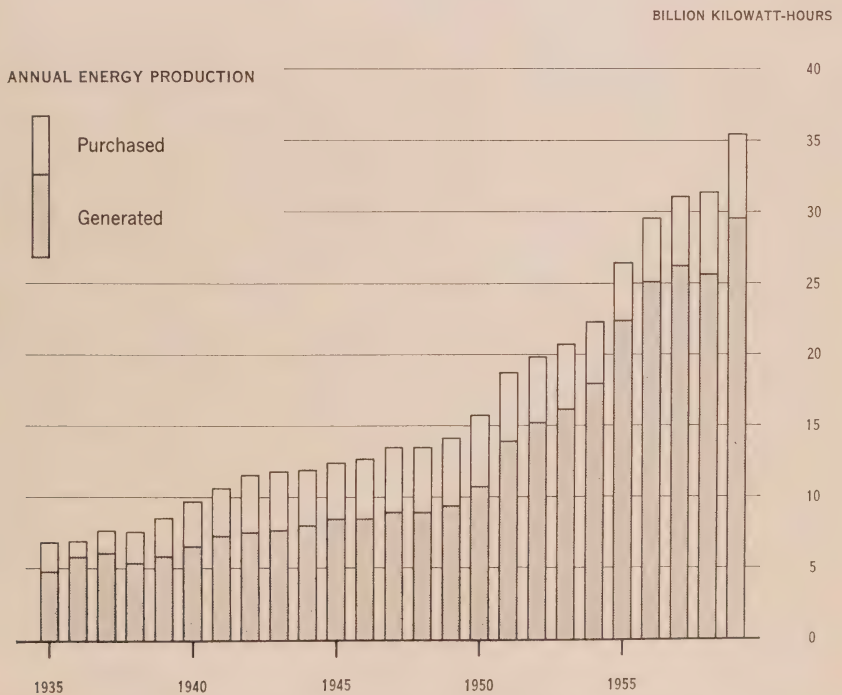
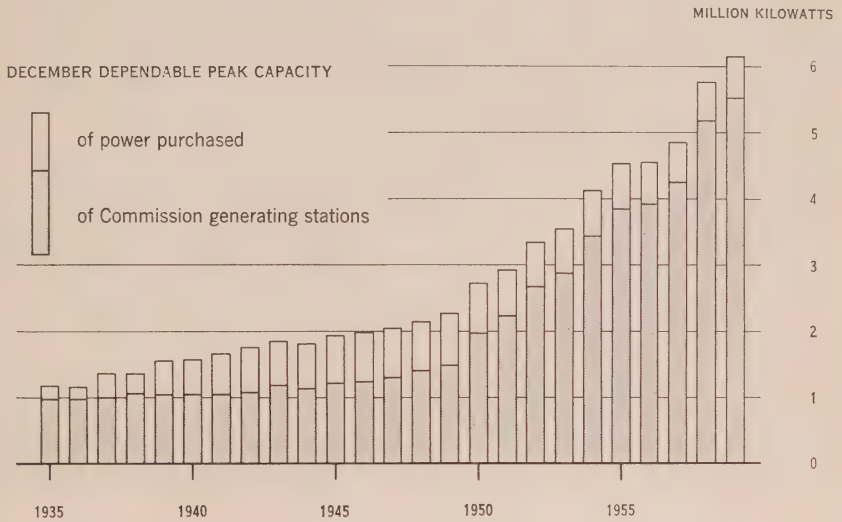
In addition to administering the enterprise over which it has direct control, the Commission exercises certain regulatory functions with respect to the group of municipal electrical utilities which it serves. In order to provide convenient and expeditious service in this dual function of regulation and supply, the Commission has subdivided its province-wide operations into nine regions, seven in the south and two in the north, with regional offices located in nine major municipalities. At present the two northern regions coincide with the two northern divisions.



**ST. LAWRENCE POWER PROJECT** — This aerial view of the Project shows the 100-square-mile Lake St. Lawrence created by the construction of the Robert Moses Power Dam and the Robert H. Saunders-St. Lawrence Generating Station. These twin stations have a total installed capacity of more than 1.8 million kilowatts in 32 generating units. In the background the Long Sault Dam extends from Barnhart Island to the United States mainland.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

TOTAL POWER RESOURCES AND ENERGY PRODUCTION







LAKEVIEW GENERATING STATION — The site of the thermal-electric station on the western outskirts of Metropolitan Toronto, where the first of four 300,000-kilowatt turbo-generators is scheduled for service by late 1961

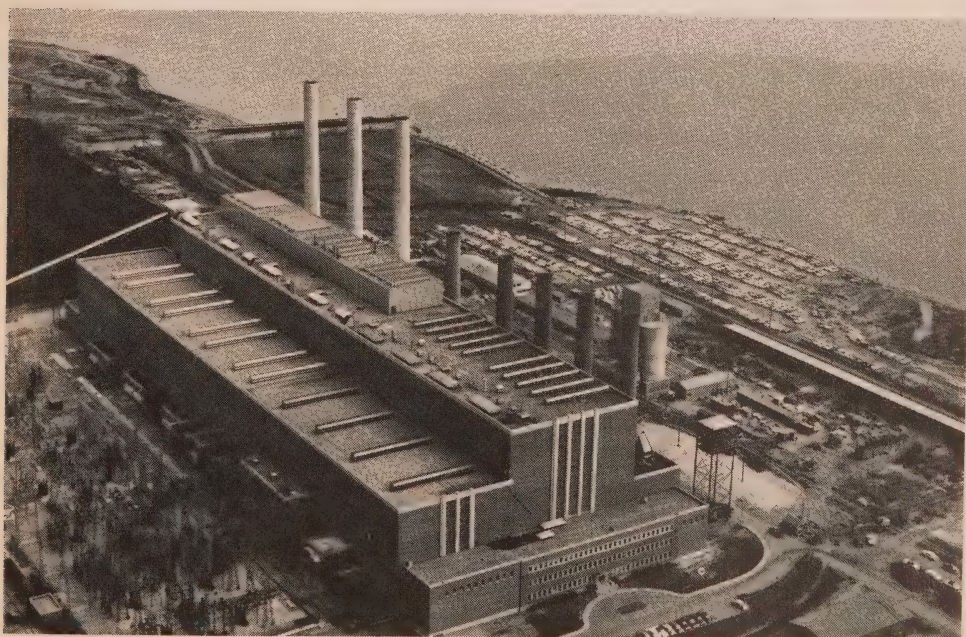
The Commission is primarily concerned with the provision of electric power by generation or purchase and its delivery in bulk either for resale, or for use in the industrial operations of certain customers served directly. Power for resale is delivered to the associated municipal electrical utilities, and to certain interconnected systems, including a number of independent municipal distribution systems, operating within or beyond the Provincial boundaries. The industrial customers served directly include mines and industries in unorganized areas. Some power users located within areas served by the municipal utilities are also served by the Commission since their power requirements may be so large or may create supply conditions so unusual as to make service by the local municipal utilities impracticable. In total, bulk delivery for resale and for industrial use accounts for about 90 per cent of the Commission's energy sales. The remaining 10 per cent of the Commission's sales are made to ultimate customers either in rural areas served on behalf of the townships by the Commission's rural distribution facilities, or in a relatively small group of municipalities served by Commission-owned local distribution systems. In general, however, retail service to ultimate customers in most cities and towns, in many villages, and in certain populous township areas is supplied by the associated electrical utilities, owned and operated by local commissions and functioning under the general supervision of The Hydro-Electric Power Commission of Ontario as provided for in The Power Commission Act and The Public Utilities Act.



## Financial Features

The basic principle governing financial operations of the undertaking and its associated municipal electrical utilities is that service is provided at cost. In the Commission's operations, cost of service includes payment for power purchased, charges for operating and maintaining the power systems, and related fixed charges. The fixed charges represent interest on debt, reserve provisions for depreciation and for contingencies and rate stabilization, and the further provision of a sinking fund reserve for retiring the Commission's long-term debt. The municipal utilities operating under cost contracts with the Commission are billed throughout the year at interim rates based on estimates of the cost of service. At the end of the year, when the actual cost of service is established, the necessary balancing (debit or credit) adjustments are made in their accounts. Retail rates for the municipal utilities are established at levels calculated to produce adequate revenue to meet cost. The Commission's retail rate structure for rural service other than industrial power service has been uniform throughout the Province since 1944.

The enterprise from its inception has been self-sustaining. The Province, however, guarantees the payment of principal and interest on all bonds issued by the Commission and held by the public. In addition, the Province has materially assisted the development of agriculture by contributing under The Rural Hydro-Electric Distribution Act toward the capital cost of extending rural distribution facilities.



**RICHARD L. HEARN GENERATING STATION** — This station, placed in service in Toronto in 1951, is being extended by the addition of four 200,000-kilowatt generating units. The first of the additional units was installed early in 1959. The remainder are scheduled for service in 1960. When completed, the installed capacity of the station will total 1.2 million kilowatts.



## Statistical

	1950
Dependable peak capacity, December..... thousand kw	2,730
Primary power requirements, December..... thousand kw	2,799
Annual energy generated and purchased..... million kwh	15,880
Primary..... million kwh	15,287
Secondary..... million kwh	593
Annual energy sold by the Commission..... million kwh	14,074
Annual revenue of the Commission (net after refunds)..... million \$	99*
Fixed assets at cost..... million \$	861*
Gross expenditure on fixed assets in year..... million \$	171*
Total assets, less accumulated depreciation..... million \$	934*
Long-term debt..... million \$	571*
Transmission line..... circuit miles	13,637
Primary rural distribution line..... circuit miles	34,793
Average number of employees in year.....	21,187
Number of associated municipal electrical utilities.....	321
Ultimate customers served by the Commission and municipal utilities..... thousands	1,187

\* Financial figures for 1950 relate to a 14-month period ending December 31.

### Annual Summary—1959

The summary table of statistics on this page shows an increase of 12.0 per cent in kilowatt-hour sales and an increase of 7.6 per cent in net revenue.

During 1959 the Commission established a new record for the additional generating capacity placed in service in any one year. Twelve units were placed in service, nine at Robert H. Saunders-St. Lawrence Generating Station and one unit at each of Richard L. Hearn Generating Station, Silver Falls Generating Station, and Abitibi Canyon Generating Station. The additional unit at Richard L. Hearn Generating Station, however, was not available at the time of the system peak in December.

Ceremonies were held at Robert H. Saunders-St. Lawrence Generating Station on June 27 in conjunction with the official opening of the St. Lawrence Seaway. Her Majesty Queen Elizabeth II and His Royal Highness the Prince Philip attended, together with the Honourable Richard M. Nixon, Vice-President of the United States. At the base of the monument established at the International Boundary, Her Majesty unveiled an inscription commemorating the co-operative aspects of the great international power project.

Construction work is proceeding on hydraulic developments at Otter Rapids on the Abitibi River and Red Rock Falls on the Mississagi River. Field studies have been undertaken at those other potential hydraulic sites in northern Ontario which seem most advantageous for economic development. Intensive consideration is being given to problems involved in the transmission of this power at extra-high voltage for use in areas of concentrated load.

The unit placed in service at Richard L. Hearn Generating Station was one of four 200,000-kilowatt units scheduled for installation before the end of 1960.

## Summary 1950-1959

1951	1952	1953	1954	1955	1956	1957	1958	1959
2,942	3,353	3,565	4,135	4,530	4,552	4,844	5,761	6,155
3,109	3,278	3,488	3,702	4,229	4,514	4,784	5,139	5,556
18,811	19,974	20,912	22,386	26,555	29,523	31,101	31,450	35,465
17,544	18,774	19,951	20,788	23,258	25,537	27,405	28,382	31,546
1,267	1,200	961	1,598	3,297	3,986	3,696	3,068	3,919
16,632	17,728	18,587	19,928	23,909	26,828	28,318	28,633	32,058
102	112	136	143	162	183	197	198	213
1,020	1,177	1,355	1,469	1,573	1,733	1,931	2,108	2,248
165	163	184	133	115	173	209	191	154
1,099	1,266	1,491	1,653	1,788	2,011	2,255	2,423	2,548
690	862	1,040	1,162	1,209	1,392	1,573	1,691	1,786
14,280	14,813	15,251	15,785	16,115	16,489	16,717	17,499	17,713
38,198	40,277	41,589	42,540	43,851	44,492	45,375	46,438	47,351
21,174	19,570	19,242	18,750	17,278	18,075	19,597	17,701	15,866
324	327	332	338	343	350	351	354	354
1,249	1,316	1,390	1,467	1,540	1,612	1,674	1,757	1,830

The program of thermal-electric generating station construction in the Toronto area was expanded during 1959 to include the third and fourth 300,000-kilowatt units at Lakeview Generating Station, which are scheduled for service in 1963 and 1964. Work continued at Thunder Bay Generating Station where a 100,000-kilowatt unit is to be brought into service late in 1961. In that year also, work may be under way for the construction of Canada's first large-scale nuclear power development. A site on the shore of Lake Huron between Kincardine and Port Elgin was established for this project during 1959. Meanwhile excellent progress was made in the construction of the 20,000-kilowatt Nuclear Power Demonstration plant which is being built as a joint undertaking by the Commission, Atomic Energy of Canada Limited, and Canadian General Electric Company Limited. It is scheduled for initial service in 1961.

On July 9, 1959 a light supplied with power at a frequency of 25 cycles was turned off in a residence in Leaside and a light supplied with 60-cycle power was turned on. This symbolic act marked the official completion of the program for standardizing frequency at 60 cycles in the Southern Ontario System and the Northeastern Division of the Northern Ontario Properties. The Frequency Standardization Section in this year's Report gives a brief historical summary of the entire operation, which was the most extensive of its kind in electrical utility history.

## GUIDE TO THE REPORT

Details of the Commission's activities which have been briefly summarized in the foregoing paragraphs are given in the seven sections and four appendices of the Report which follow. Operations, finance, customer relations, and frequency standardization are the subjects of the first four sections and their

related appendices. The narrative in Section I dealing with the production, purchase, and delivery of power is supplemented in the text by reports of weather conditions, maintenance, communications, and forestry, all of which are related to operations. Supplementary tables are in Appendix I. Section II includes the Commission's balance sheets, statements of financial operations, and tables showing the funded debt and advances from the Province of Ontario. Appendix II includes supporting schedules and accounts, in addition to the statements of reserves, sinking fund equity, and cost of power. In Section III consideration is given first to the wholesale operation of supplying power to municipal electrical utilities and to certain interconnected systems for resale, and second to service to certain industrial customers supplied directly by the Commission. The supply of power in wholesale quantities to the rural operating areas is then briefly discussed under the heading Rural Electrical Service. This commentary is immediately followed by a discussion of retail aspects of service to ultimate customers served by the Commission in these areas. Supplementary information on rural service is to be found in Appendix III. Another subsection of Section III, in the form of reports from the regions, deals with certain activities relative to service in municipal utilities. Many of these activities have involved participation by, or the assistance of, members of the Commission's staff. Frequency standardization is the subject of Section IV, which this year is in the form of a brief historical summary of the entire ten-year operation.

Engineering and construction activities are discussed in the two sections that follow. Section V deals with the planning and construction of facilities for the delivery of power. It includes descriptions of the more important construction projects and statistics relative to these and other facilities for the generation, transformation, and delivery of power. Section VI contains reports on the progress of some of the investigations being conducted by members of the Commission's Research Division.

Section VII deals with aspects of employee relations, training, and staff administration. Appendix IV lists Orders in Council and legislation pertaining to the Commission's affairs.

A large part of the Report is devoted to aspects of retail service to ultimate customers, especially that provided by the municipal electrical utilities. The commentary on these activities and the statistical tables applicable to them are brought together in a supplement to the Report entitled Municipal Electrical Service beginning on page 187. The complete municipal service supplement includes four statements: (1) Statement "A"—balance sheets, (2) Statement "B"—operating statements, (3) Statement "C"—rates, and (4) Statement "D"—other statistical information relating to the municipal systems. As the service rendered by the Commission-owned local systems is comparable to that provided by the municipal utilities, the local systems are included in the statistical summaries in the municipal supplement and are also listed in Statements "C" and "D".

## SECTION I

### OPERATION OF THE SYSTEMS

A trend towards recovery from the economic recession had been firmly established by the beginning of 1959 and there was continued improvement in general business activity in Ontario throughout the year. This in turn resulted in increased demands for power.

Primary peak requirements, all systems, were 8.1 per cent greater in December 1959 than in December 1958. The largest proportionate increase took place in the Northeastern Division where the December peak load was 21.4 per cent greater than the peak in February 1958. The Northwestern Division primary peak requirements showed only a modest increase over the 1958 maximum. In the Southern Ontario System, on the other hand, primary peak requirements were up by 7.7 per cent, a rate of growth considerably faster than the long-term (1922-1959) rate of approximately 6 per cent.

The increases in requirements were met by a net increase of 393,600 kilowatts in dependable peak capacity resulting, in part, from a recalculation of the dependable capacities of certain stations on the basis of performance,



POWER SUPPLY STATISTICS—1959  
(Figures for 1958 and Per Cent Increase in *Italic Type*)

		Southern Ontario System	Northern Ontario Properties		Total
			NORTH- EASTERN DIVISION	NORTH- WESTERN DIVISION	
Resources					
Dependable peak capacity kw		5,213,700	345,400	595,600	6,154,700
—December kw		4,930,400 5.7%	300,400 15.0%	530,300 12.3%	5,761,100 6.8%
Requirements					
PRIMARY					
Peak—Annual maximum kw		4,578,541	550,067	450,748	5,556,474*
	kw	4,252,715 7.7%	453,199 21.4%	448,821 0.4%	5,139,004* 8.1%
Energy—Total annual	kwh	25,226,267,417	3,559,611,260	2,760,792,799	31,546,671,476
	kwh	22,633,438,156 11.4%	3,034,644,968 17.3%	2,713,801,843 1.7%	28,381,884,967 11.2%
Loads					
PRIMARY AND SECONDARY					
Peak—Annual maximum kw		4,913,941	550,067	554,196	6,018,204*
	kw	4,459,367 10.2%	469,048 17.3%	489,121 13.3%	5,417,536* 11.1%
Energy—Total annual	kwh	28,574,335,017	3,615,319,810	3,275,759,457	35,465,414,284
	kwh	25,486,481,756 12.1%	3,133,555,628 15.4%	2,830,342,462 15.7%	31,450,379,846 12.8%
PRIMARY ONLY					
Energy—for use in Ontario	kwh	24,824,180,417	3,558,196,571	2,760,792,799	31,143,169,787
	kwh	22,231,354,156 11.7%	3,034,238,923 17.3%	2,713,801,843 1.7%	27,979,394,922 11.3%
—Total annual	kwh	25,226,264,417	3,559,611,260	2,760,792,799	31,546,668,476
	kwh	22,633,438,156 11.4%	3,034,644,968 17.3%	2,713,801,843 1.7%	28,381,884,967 11.2%

\*These annual maxima are the arithmetic sums of the three system peaks in December.  
In the two northern divisions the annual maximum does not necessarily occur in December.

but principally from the placing in service of additional units at three hydro-electric stations. Nine units installed during the year at the Robert H. Saunders-St. Lawrence Generating Station brought the station to its full complement of sixteen units. At Abitibi Canyon Generating Station one 45,000-kilowatt unit was placed in service, bringing the total number of units there to five, and the single 45,500-kilowatt unit in the newly constructed station at Silver Falls was placed in service. The fifth unit, a 200,000-kilowatt turbo-generator, was installed at Richard L. Hearn Generating Station in Toronto but was not available as a source of power at the time of the system peak.

The total net output of all resources in 1959 was 35.5 billion kilowatt-hours, an increase of 12.8 per cent over output in 1958. Of this amount, 29.3 billion kilowatt-hours were produced by the Commission's hydro-electric generating stations and 0.3 billion kilowatt-hours by its thermal-electric stations; the balance was purchased.

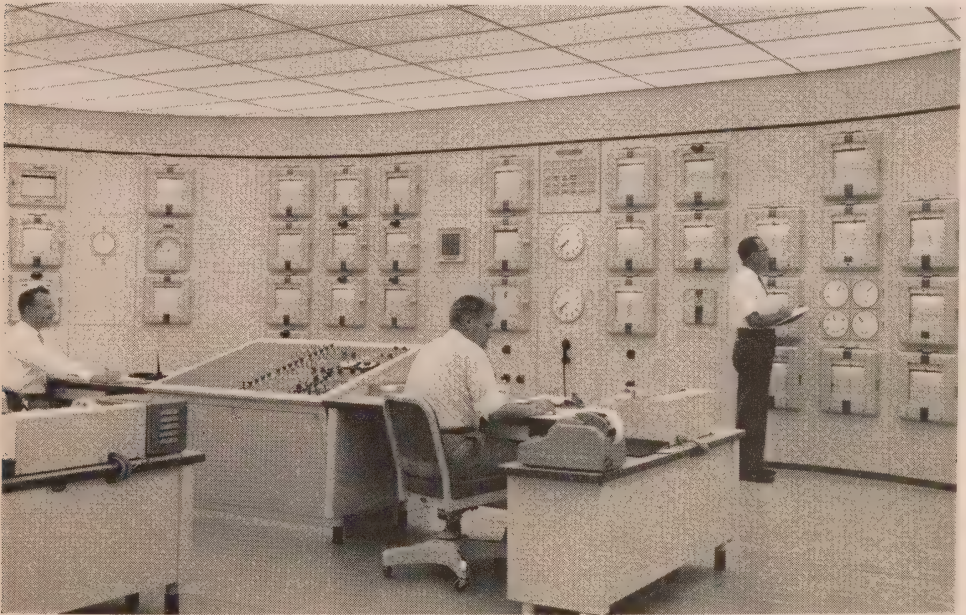
### **Stream-flow and Storage Conditions**

Water conditions generally throughout the Province were more favourable than they had been in 1958. However, flow on the Niagara River, which provides such a large part of the Southern Ontario System's hydro-electric power, fell short of the long-term median.

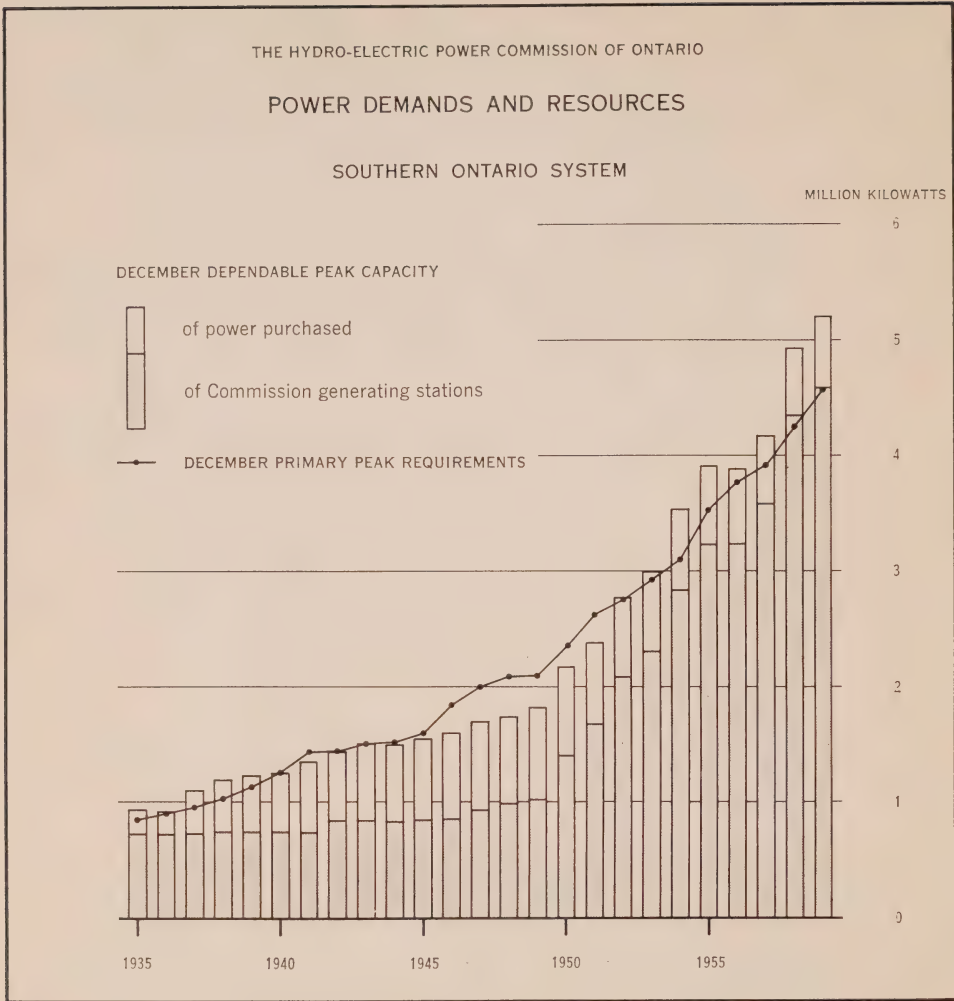
During the summer months, run-off in the Southern Ontario System declined and the volume of water held in storage fell below normal in most watersheds; however, heavy rains in August resulted in excellent water storage conditions which continued until the end of the year. Similar conditions occurred in the Northeastern Division during 1959. In the Northwestern Division, water storages were replenished when the spring freshet began late in June, and subsequently heavy rains during the late summer and fall months resulted generally in good water conditions throughout the Division.

### **System Control Centre**

Early in 1959 the Commission established a new system control centre at Richview Transformer Station in western Metropolitan Toronto. By June 1, the staff of the former control centre at Head Office had transferred their operation



The Commission established a new system control centre at Richview Transformer Station from which the operation of the high-voltage network in southern Ontario is regulated. Operators seated before a control panel receive telemetered information which indicates the extent of adherence to the operating schedule.



to the new location. There the production supervisor will be responsible for economic despatch of power from generating sources, and the operation of load-frequency control equipment; the system supervisor will be concerned with the operation of the transmission system, voltage control, and equipment outages.

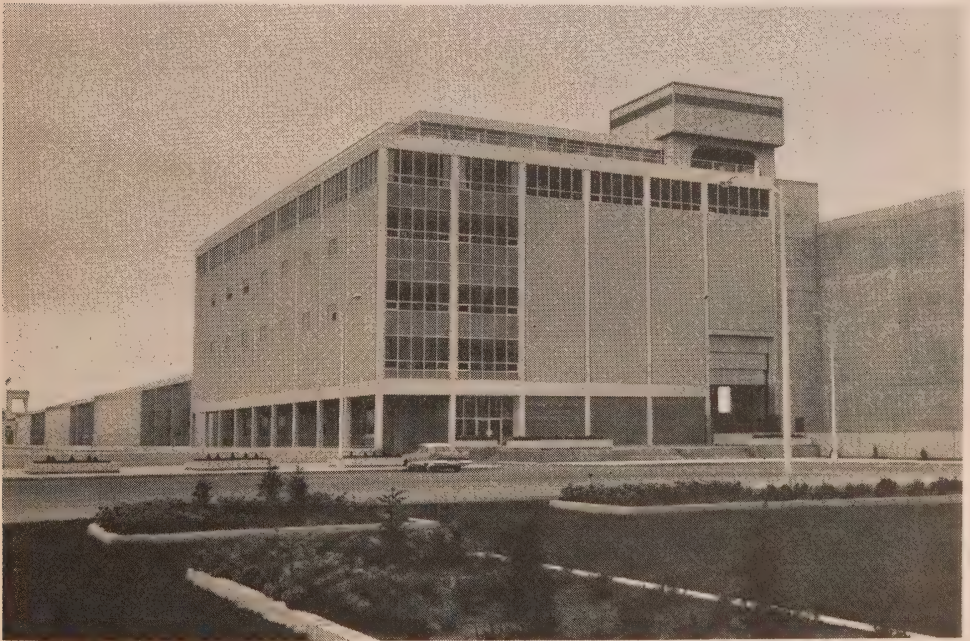
The new centre will provide efficient and flexible control of widespread and complex operations. Located physically close to the Commission's high-voltage network, and centrally with respect to electrical loads, the control centre is a focal point for telemetered information on power loads throughout the Southern Ontario System. A console in the main operations room is equipped with automatic controls to regulate generation in accordance with changes in system load. The output of selected generating stations is raised or lowered by electric impulse control. Provision has been made also for the future installation of a special despatch unit which will automatically compute where the next block of power can be most economically produced, taking into consideration the cost of generating power at the various stations, and losses involved in transmission to the load centre.



## SOUTHERN ONTARIO SYSTEM

The primary peak demand for the Southern Ontario System occurred on December 21, and at 4,578,541 kilowatts was 7.7 per cent greater than the primary peak demand in 1958. Greater generating capacity at Robert H. Saunders-St. Lawrence Generating Station contributed largely to the 18.9 per cent increase in output from system hydro-electric resources as compared with output in 1958. It was possible to reduce the number of more costly kilowatt-hours sent out from thermal-electric resources by 44 per cent, increase transfer to the Northeastern Division by 38.1 per cent, reduce purchases of power by 1.3 per cent, and still make 12.1 per cent more energy available to the system during the year.

The extensive rearrangement and expansion of transformation and transmission facilities associated with the incorporation of Robert H. Saunders-St. Lawrence Generating Station into the system has been described in earlier Reports. During the summer decline in waterflows, the Commission purchased economy power and energy from the Quebec Hydro-Electric Commission to the extent that maximum permissible loadings on these lines would allow. Additional transmission capacity became available when facilities were provided to incorporate Cataragui Transformer Station and Ottawa-Hawthorne Transformer Station. When a new 230-kv circuit from E. V. Buchanan Transformer Station to Lambton Transformer Station was placed in service in October, deliveries of reactive power were no longer required from The Detroit Edison Company.



ST. LAWRENCE POWER PROJECT — The administration wing of the Robert H. Saunders-St. Lawrence Generating Station overlooks the main dam structure. From an attractively furnished gallery in the upper storey, visitors have a good view of the adjoining powerhouses.



The Commission re-established parallel operation with the system of the Quebec Hydro-Electric Commission during the course of the year; though parallel operation was subsequently discontinued, further tests will be carried out in 1960. In August, the first exchange of water for power between the Commission and the Power Authority of the State of New York took place. Water was diverted to the Robert Moses Power Dam, and power was returned to the Commission over interconnections at Cornwall and Niagara Falls.

For a trial period beginning late in November and continuing through March 1960, the International Joint Commission, through the International St. Lawrence River Board of Control, granted permission for peaking production at the international powerhouses of the St. Lawrence Power Development. The average flow allotted for the day remains unchanged but each powerhouse may exceed the daily average by 10,000 cfs during peak periods. The arrangement is an advantage to the Commission in reducing the amount of thermal-electric production required at time of peak. There has been no appreciable effect on river-levels as a result of this method of operation.

The last four 25-cycle generating units of the Commission's Quebec suppliers were standardized at 60 cycles in 1959, the final one being returned to service in September. The 25-cycle synchronous condenser at A. W. Manby Transformer Station was also standardized during the year. A number of static capacitors were installed at Oakville, Toronto-Bathurst, and Toronto-Fairbank Transformer Stations as part of the program to supply additional reactive power in the Toronto area.



The beauty of a winter scene hides the costly damage done by the sleet storm at the year end. The heavy ice formation on conductors and poles seriously interrupted service to customers in a large area in southern Ontario.

### Sleet Storm Damage

Freezing rain in late December resulted in heavy ice formation on transmission and distribution facilities in southern Ontario, and in the period of just over three weeks between December 27, 1959 and January 22, 1960 there occurred a succession of four major ice storms which meteorological records recognize as the worst in Commission history. Damage to supply facilities on December 28 and 29 left 48,000 Commission customers and 60,000 municipal utility customers without power for periods in excess of 6 hours. Nearly 40 per cent of the customers in North York Township and Scarborough Township municipal systems were affected. In the subsequent sleet storms, extensive damage to distribution lines resulted in comparatively long interruptions to service. The total area affected stretched from London on the west to Oshawa on the east and in a north-south direction from Georgian Bay to the Niagara area.

At the peak of the repair operation a force of over 2,000 Commission tradesmen was working from 16 to 18 hours a day, and approximately 800 municipal utility tradesmen were also engaged in similar work. The Commission crews were equipped with 4 helicopters and nearly 350 work vehicles of different types. The total cost of repairs to all the Commission's lines is estimated at \$1.5 million.



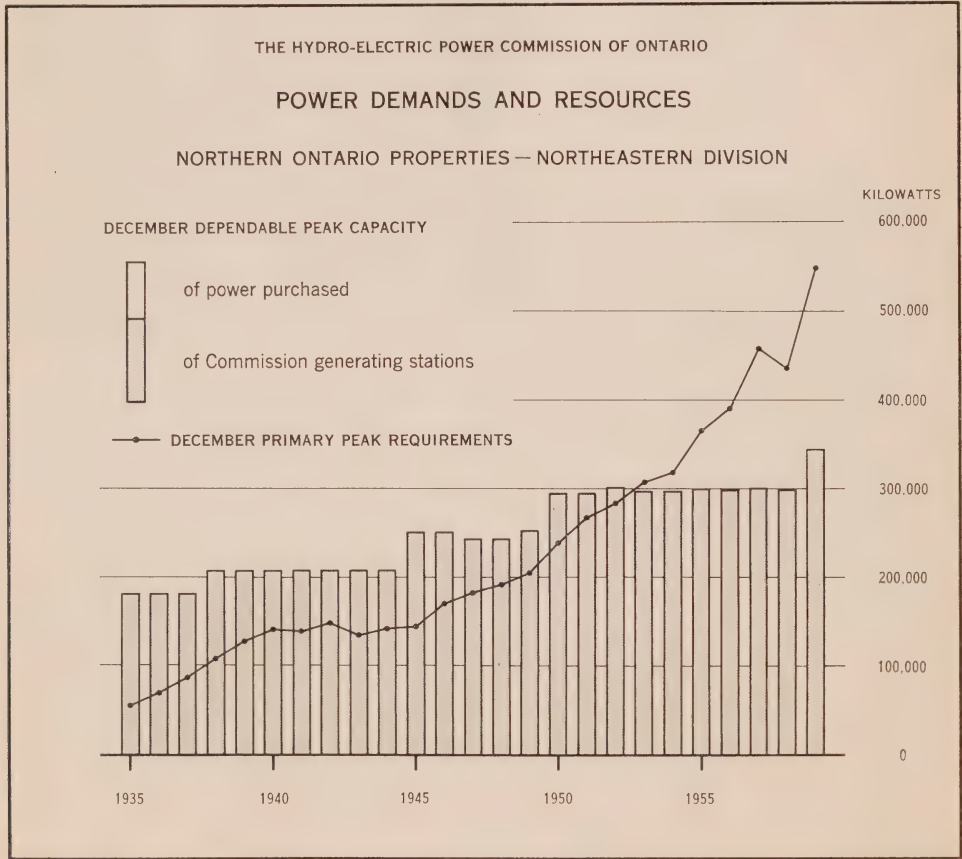
Service to customers is maintained under the most rigorous weather conditions. Linemen, without thought for personal convenience, or the convenience of their families, worked through the year-end holiday period to restore the flow of power.

The greatest damage to high-voltage lines occurred in the vicinity of Orangeville. Here the two skywires and six conductors of the 230-kv circuits between Essa and Detweiler Transformer Stations were coated with ice and snow estimated at 25 tons per span. Early in January 1960 the ice was melted from this line by connecting the output of Des Joachims Generating Station alternately into each circuit, the line being first short-circuited and grounded at a point 40 miles southwest of Essa Transformer Station just outside the area most heavily affected by ice. Under a current of 1,300 amperes the ice was melted from each circuit in approximately one hour.



NORTHERN ONTARIO PROPERTIES

The total energy made available to the Northeastern Division was 15.4 per cent greater in 1959 than in 1958. The increased primary energy demands were met for the most part by substantially increased transfers of energy from the Southern Ontario System. The primary peak demand for the year occurred in December and amounted to 550,067 kilowatts, which represents a real increase of about 6 per cent over demands adjusted on a comparable basis for 1958. The adjustment makes allowance for the strike in the mining industry during the autumn and early winter months of 1958. In the Northwestern Division, the output of the Commission's stations amply provided for a primary energy demand which was only slightly greater than demands in 1958. As a result the energy available for sale in the secondary market was substantially increased. The Commission's share of the energy produced in Manitoba from water diverted from Lake St. Joseph was sold in the Province of Manitoba. The primary peak demand in the northwest occurred in June and amounted to 450,748 kilowatts; the primary peak demand in December 1959 was 427,866 kilowatts. The decrease resulted from the decision of a large mining customer to reduce dredging operations by 50 per cent.

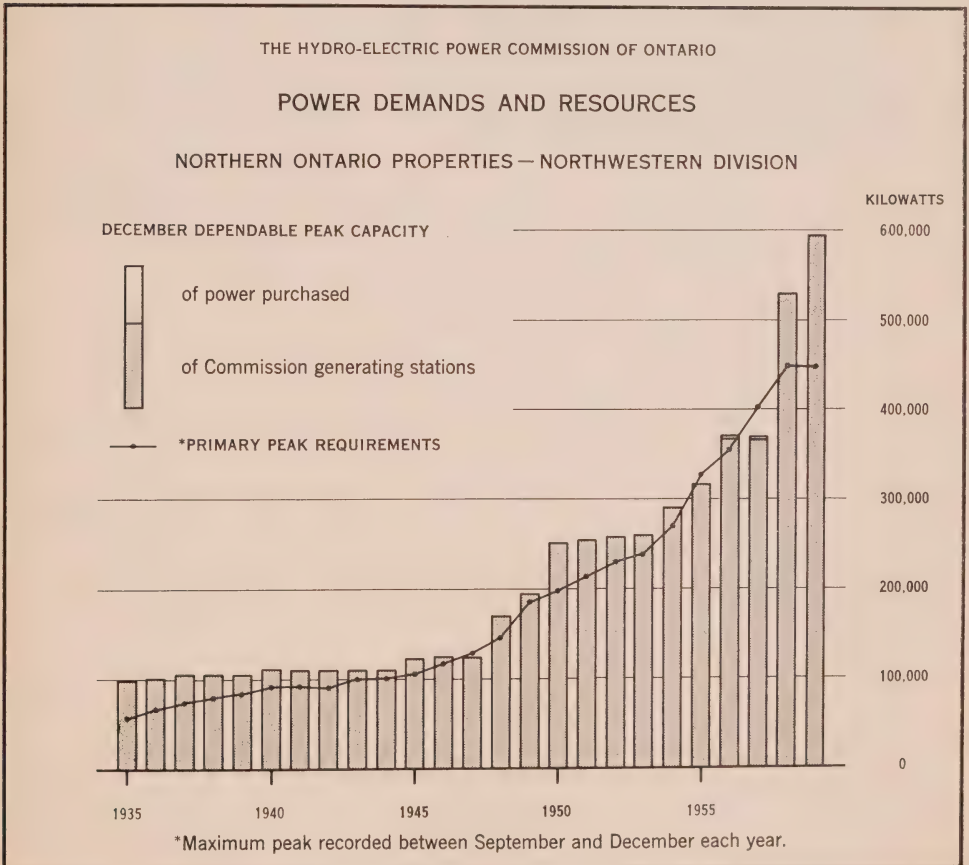


## MAINTENANCE OF THE SYSTEMS

### Electrical and Mechanical Maintenance

Apart from routine activities, the maintenance situations of most interest, and generally involving higher than normal expense, were associated with high-voltage switchgear. Two problems involved insulation failure, the first in four support insulators of air-blast circuit-breakers, the second in two of the current transformers associated with the 230-kv minimum-oil circuit-breakers at Detweiler Transformer Station. There were several failures on interrupters on oil circuit-breakers. Six large high-voltage power transformers and nine smaller transformers of distribution voltage were completely dismantled following core or winding failure. Two of the large and one of the small transformers were still under warranty by the manufacturers. Complete rewinding was required for only one small hydraulic generator.

Maintenance training centres established at Toronto-Leaside Transformer Station in 1959 and at Toronto-Bridgman Transformer Station in 1958 have facilitated the practical instruction of apprentices considerably. A part of the condenser building at Toronto-Leaside Transformer Station was equipped with surplus equipment for use in training in the maintenance of rotating machines and circuit-breakers.

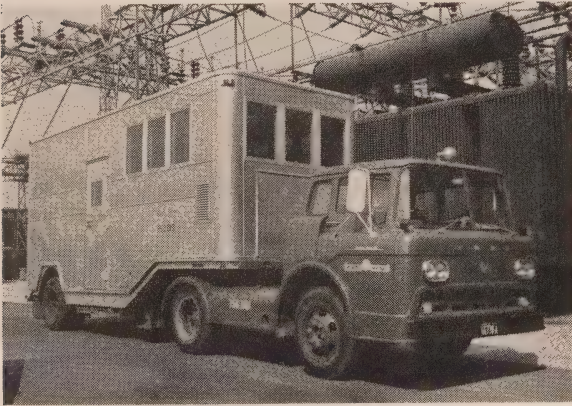




As an experiment in two of the regions, the period intervening between routine overhauls at distributing stations has been extended to two years. If, as expected, more thorough overhaul at less frequent intervals results in satisfactory security at lower cost, the policy will be extended eventually to all regions.

The Commission purchased a larger mobile unit for removing gas from insulating oil. Capable of treating 2,000 gallons per hour, twice the capacity of

any one of the three already in use, the new unit will make for improved transformer maintenance.



A wide variety of modern equipment is used by the Commission in the maintenance of its electrical system. Here, a cable-testing truck is being used to locate faults and carry out pre-service tests on underground transmission and distribution cables.

The failure of carbon-dioxide fire-protective equipment to operate during certain fault conditions has made extensive testing necessary. A regular testing program now in effect should ensure the reliability of fire-protective systems on large generating units.

The inspection and mechanical maintenance of hydraulic equipment was carried out on satisfactory schedules.

At Alexander Generating Station, crews welded severe cracks on four blades of a propeller turbine runner without dismantling the equipment.

### **Lines and Communications**

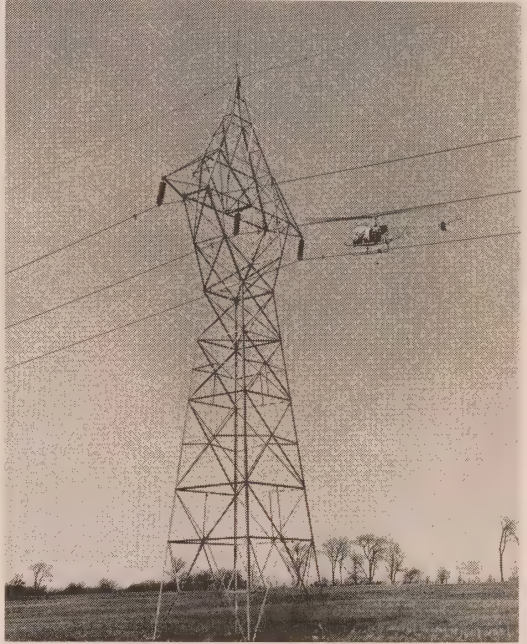
Live-line maintenance was carried out in the three-year program of repair work on the 230-kv transmission circuits bringing power from sources on the Gatineau River. The cable-type dampers on these circuits are being replaced by more modern torsion-type dampers. A film taken of the work in progress will assist in lineman training and will undoubtedly stimulate interest in live-line work. Live-line work on other high-voltage lines as well as on subtransmission and distribution circuits is becoming increasingly a routine operation with consequent improvement in continuity of service.

At the eastern entrance to the city of Hamilton a 115-kv double-circuit steel transmission tower was raised 20 feet by crane to provide clearance for a new through highway. At this tower the line changes direction by 34 degrees. Two mobile cranes with 100-foot booms and two crawler tractors with  $\frac{3}{4}$ -inch winch cables held the tower against the pull of the conductors, which were left in place under normal tension during the lifting.

In preparation for live-line maintenance on 460-kv lines in the future, consideration was given to the effect of extra-high-voltage fields on linemen working on these lines. The investigation established the feasibility of live-line work on 460-kv lines and disclosed methods of reducing the discomfort occasioned by exposure to these electrical fields.

Line maintenance helicopters operated for a total of 3,894 hours during the year to patrol over 200,000 circuit miles of transmission lines. In addition, they spent 225 flying hours during the summer spraying chemical herbicide over 5,000 acres of isolated right of way in the Northeastern and Northwestern Regions. The versatility of these machines may be judged from their use during 1959 for surveys, water-level readings, photography, forest fire control, search and rescue operations, the delivery of men and materials to isolated areas or under emergency conditions, as well as for a number of other assignments.

Under the planned pole replacement program nearly 16,300 transmission, distribution, and communication poles were installed by maintenance crews. More than 540 steel towers were cleaned and painted as part of the progressive tower maintenance arrangements. When linemen rather than painters undertake this work, it is frequently done without de-energizing the lines.



In 1959 the Commission's helicopters patrolled 158,000 miles of high-voltage transmission lines. One of the helicopters is shown here inspecting a 115,000-volt line crossing farmlands in southern Ontario.

Beginning early in the year, control of the Southern Ontario System network was gradually transferred to the new control centre at Richview Transformer Station. By the end of May the control centre was completely established and installation of the required telephone switching equipment and communication circuits had been completed. Four specially developed despatchers' private exchange telephone switchboards and a small dial telephone exchange were installed by The Bell Telephone Company. The transfer of facilities required about 6 hours, telephone service for that period being available at both locations.

### Forestry

Principally because of the lateness of the growing season there was a reduction of about 6 per cent in the acreage treated with chemicals for the control of brush growth. In all, 38,000 acres of right of way were treated in 1959. Tree pruning and removal were carried out as required to maintain clearance on over

12,000 miles of the Commission's operating lines, and also on over 1,000 miles of new or municipally owned line. Over 106,000 seedling trees were planted under the reforestation program in the Niagara, Georgian Bay, Eastern, Northeastern, and Northwestern Regions.

### **Transport and Work Equipment**

At the A. W. Manby Service Centre on the western outskirts of Metropolitan Toronto, the Commission centralizes control of a fleet of over 2,000 transport vehicles, 900 items of major work equipment, and approximately 700 other items of minor work equipment such as pumping or auxiliary lighting equipment. The service of such major equipment could be rented from outside agencies, but periodic testing of alternative methods of obtaining it indicates that operating costs would be substantially higher under the most favourable alternative arrangement. Operation of the service centre also permits the most advantageous exploitation of technological improvements in large-scale equipment.

### **Meter Shop**

A central meter shop was established at the Service Centre where meter supply as well as meter repair and verification will be centralized for the entire Commission. The services of the shop will be available to the municipal utilities when required.



**RICHARD L. HEARN GENERATING STATION** — Conveyors and booms can stockpile coal at the rate of 2,000 tons per hour at the east end of the station. More than 1.5 million tons of coal can eventually be stockpiled here. It can be conveyed to the coal bunkers at the rate of 1,000 tons per hour.



## SECTION II

### FINANCE

**T**HIS section of the Report, together with Appendix II, deals with the financial operations of the Commission as they relate to the Southern Ontario System and the Northern Ontario Properties. The general administrative bases upon which service is provided to these two systems are outlined on page 2 of the Foreword to this Report. The balance sheets and operating statements for the two systems are included in this section together with a statement of funded debt and a schedule of Provincial advances outstanding. Supporting schedules for these basic statements are to be found in Appendix II beginning, for the Southern Ontario System, on page 128, and for the Northern Ontario Properties, on page 162. The two statements of the allocation of the cost of power in Appendix II itemize for each cost-contract municipality its share of the total costs incurred and the amount billed under its interim rate. The financial operating results for the municipal electrical utilities themselves are reported in a municipal service supplement at the end of the Report.

#### **Data Processing**

The electronic data processing equipment installed and tested during 1958 was used with increasing effectiveness in 1959 as the results of early planning



for system development became apparent. Early in the year the first customer bills were processed through the computer for the Toronto Region. Staff in the



**ELECTRONIC DATA PROCESSING** — At Head Office in Toronto an operator, left, removes a reel of punched paper tape containing data received from a regional office. The operator, right, attends a high-speed sorter which can be regulated to produce other punched paper tapes, each being a consolidation of all messages of only one kind.

other regions were successively trained in using the new facilities so that by the end of 1959 five regions were operating on the new system, with the four remaining regions scheduled to change over during the early months of 1960. Concurrently the data communications network of commercial teletype facilities linking the area offices with their respective regional offices, and these in turn with Head Office, was being developed and installed. By the end of the year the bills and records for over 286,000 customer accounts were being processed by the system.

The analysis of the manpower data processing system was completed during 1959 and preparations were made for introducing the system in 1960. Electronic data processing techniques are also being applied more widely to engineering and scientific computations.

### **Effect of Rising Costs**

Although the Commission has steadfastly sought to hold the line against the pressure of rising costs, there eventually comes a time when no organization of itself can longer withstand the effects of ever-rising wage rates, increasing material costs, the high cost of borrowed money, and the upward trend of taxation or tax equivalents. Furthermore, a significant change has taken place in the relationship between the Commission's loads and resources. By contrast with the situation just over ten years ago when construction of new resources was barely able to keep abreast of rising demands for power, the Commission today is carrying a reserve of power on its systems which is deemed appropriate for emergencies. The service security obtained from this reserve of power is also a contributing factor to the increase in power cost.

During 1959 it was clearly evident that rising costs of production must soon be reflected in an increase in the cost to the Commission's customers. Rates, however, were not advanced in 1959, and in an effort to restrict costs as much as possible, the regular appropriations for stabilization of rates and contingencies were not made. Even with this reduction in reserve appropriations for 1959, and the withdrawal of \$1,201,009 from reserves of the Northern Ontario Properties, the resulting rebate to the cost-contract municipal utilities was considerably smaller than in previous years.

Careful analysis indicated that prudence left the Commission no alternative but to increase interim rates to many utilities in the Southern Ontario System beginning January 1, 1960; in either of the operating systems, when contracts with direct industrial and other customers are renewed, increases in rates will be introduced as required. Fortunately most of the associated municipal utilities affected are in a sufficiently favourable financial position that they are able to maintain their rates to their customers unchanged for 1960. In the rural areas served by the Commission, upward adjustment of rates was necessary only for certain summer cottage contracts.

### OPERATING RESULTS—1959

In the operating statements of the Commission for 1959, all receipts from the sale of secondary energy have been shown as deductions from cost rather than as revenue. In the 1958 statement of operations for the Southern Ontario System, only 25-cycle secondary energy was treated in this way.

The cost of providing service in 1959 was \$211,835,060 after applying against cost the amount of \$8,837,405 received from the sale of secondary energy. If, for comparison, 1958 results are adjusted to the 1959 basis, the cost of service in 1959 was greater than in 1958 by \$17,093,967, or 8.8 per cent. Operating costs (purchased power, operation, maintenance, and administration) were up by a substantial 12.9 per cent. This resulted mainly from increased labour and administrative costs, offset to some extent by reductions in total fuel costs at thermal-electric stations and a decrease in the amount paid for purchased power.

Gross revenues, exclusive of sales of secondary energy, amounted to \$214,680,399. These revenues are derived from municipal utilities and interconnected systems purchasing power for resale, industrial customers served directly by the Commission, and customers served by Commission-owned distribution facilities in certain municipalities and in the rural areas. On the basis of the 1959 presentation, gross revenues in 1959 exceeded revenues in 1958 by \$16,370,191, or 8.3 per cent. The excess of revenue over the cost of providing service amounting to \$2,845,339 was disposed of as follows:

#### Credited to cost-contract municipalities—

Southern Ontario System . . . . .	\$2,018,725
Northern Ontario Properties . . . . .	34,861
Credited to Rural Power District stabilization of rates and contingencies reserve, Southern Ontario System . . . . .	1,085,604
Charged to Surplus account of the Province to meet a deficiency of revenue in serving customers for the account of the Province in the Northern Ontario Properties . . . . .	293,851
	<hr/>
	\$2,845,339

## SOUTHERN ONTARIO SYSTEM

The cost of providing service at \$172,860,553 was 8.1 per cent greater than the comparable cost in 1958, and gross revenue at \$175,964,882 was up by 7.9 per cent. The gross revenue figure quoted does not include \$7,913,126 received from the sale of secondary energy. This amount was applied to reduce the cost of power to the figure quoted, \$3,066,481 being derived from 60-cycle secondary export and \$4,846,645 from other secondary sales. The gross revenue figure and the receipts from secondary sales together apply to the 25,804,925,143 kilowatt-hours which are the Southern Ontario System share of total Commission sales, wholesale and retail, as shown on the table on pages 116 and 117.

Operating costs, including the cost of power purchased, were up from those of 1958 by 10.1 per cent. The remainder of the rise in the cost of providing service was brought about by increases of 17.7 per cent in interest, 3.0 per cent in depreciation, and 16.3 per cent in funds set aside for the retirement of long-term debt. The regular provision for depreciation was augmented by \$1,330,255, which was the amount required from 1959 revenues to provide for the possible early retirement of certain older hydraulic generating stations. The year-to-year increase was small because the 1958 provision had included a larger amount to reflect a reduction in the life expectancy of rural distribution and other facilities. The increase in total cost was not greater than 8.1 per cent because of the elimination of any provision for general stabilization of rates and contingencies and the substantial reduction in the special provision for nuclear development.

The deduction from cost of \$589,547 for matured sinking fund is the sum of the amounts credited to the accounts of 139 municipal utilities. The deduction is equivalent to the sinking fund provision for the current year on debt incurred for plant construction prior to 1920, the amount of the debt having been now fully retired through sinking fund payments. The 139 utilities have met their sinking fund obligations in connection with this debt over a period of forty years and are no longer required to make these payments.

The cost chargeable to the Commission on frequency standardization account during the year (see page 133) was \$14,507,371. This total was offset to the extent of \$205,539 by a credit adjustment in charges applicable to rural facilities. An amount of \$8,155,021 plus interest of \$7,823,293 was charged to the cost of power, and \$205,539 was credited to the Rural Power District to adjust the standardization expense for rural facilities. The amount to be charged in future years was increased by \$7,392,152, including an adjustment of \$1,039,802 made in the amount amortized prior to 1959 which brought the total to \$199,353,727 at the end of 1959.

The table of frequency standardization costs and charges which has appeared in this section for the past several years is included this year in Section IV, which provides a brief historical review of the entire frequency standardization operation.



**Application of Special Fund for Cost Relief**

In accordance with a resolution passed at the 1959 annual meeting of the Ontario Municipal Electric Association, a charge of 5 cents per kilowatt was levied on all cost-contract utilities in order to provide funds for the relief of those utilities experiencing unduly heavy costs for low-voltage distribution. This is a revision and extension of the policy followed in recent years when the interest only on a fund raised in a similar way some years ago was used to reduce the total cost of power to those utilities where this cost was particularly high. In 1959 a total of 88 utilities received benefit from this form of cost relief and the maximum charge to any municipality for low-voltage distribution was \$5.36 per kilowatt, as compared with \$14.70 per kilowatt in 1958 without the application of cost relief for this specific purpose.

In view of this and other considerations mentioned in the analysis of the operating statement, the total cost of power per kilowatt to cost-contract utilities rose, on the average, from \$37.20 in 1958 to \$37.68 in 1959. Apart from one isolated instance in which quite unusual operating conditions apply, the maximum cost of power charged to any municipal utility in 1959 was \$48.22 as compared with \$46.26 in 1958.

**NORTHERN ONTARIO PROPERTIES**

The cost of providing service to all customers in the Northern Ontario Properties at \$38,974,507 was 12.1 per cent higher than the cost in 1958. The cost of service to rural customers rose by 15.8 per cent.

Operating costs of \$20,820,613 were 23.5 per cent greater than in 1958. These include an increase of 43.3 per cent in the charge for energy transferred from the Southern Ontario System, which reflects the increase in sales of kilowatt-hours in the Northeastern Division. There were also increases of 20.6 per cent in interest charges, 12.7 per cent in depreciation provisions, and 20.7 per cent in funds set aside for the retirement of long-term debt. These increases in costs were offset to some extent by a reduction in the amount set aside for nuclear development and by the withdrawal of \$1,201,009 from the reserve for stabilization of rates and contingencies. The table of frequency standardization costs is included with the historical summary of the entire operation in Section IV.

The cost of frequency standardization in the Northeastern Division of the Northern Ontario Properties was \$62,133 in 1959. An amount of \$218,114 plus \$187,625 in interest on the outstanding balance of cost was charged to operations in the current year, and at the end of 1959 there remained a balance of \$3,583,659 to be charged to the cost of power in future years.

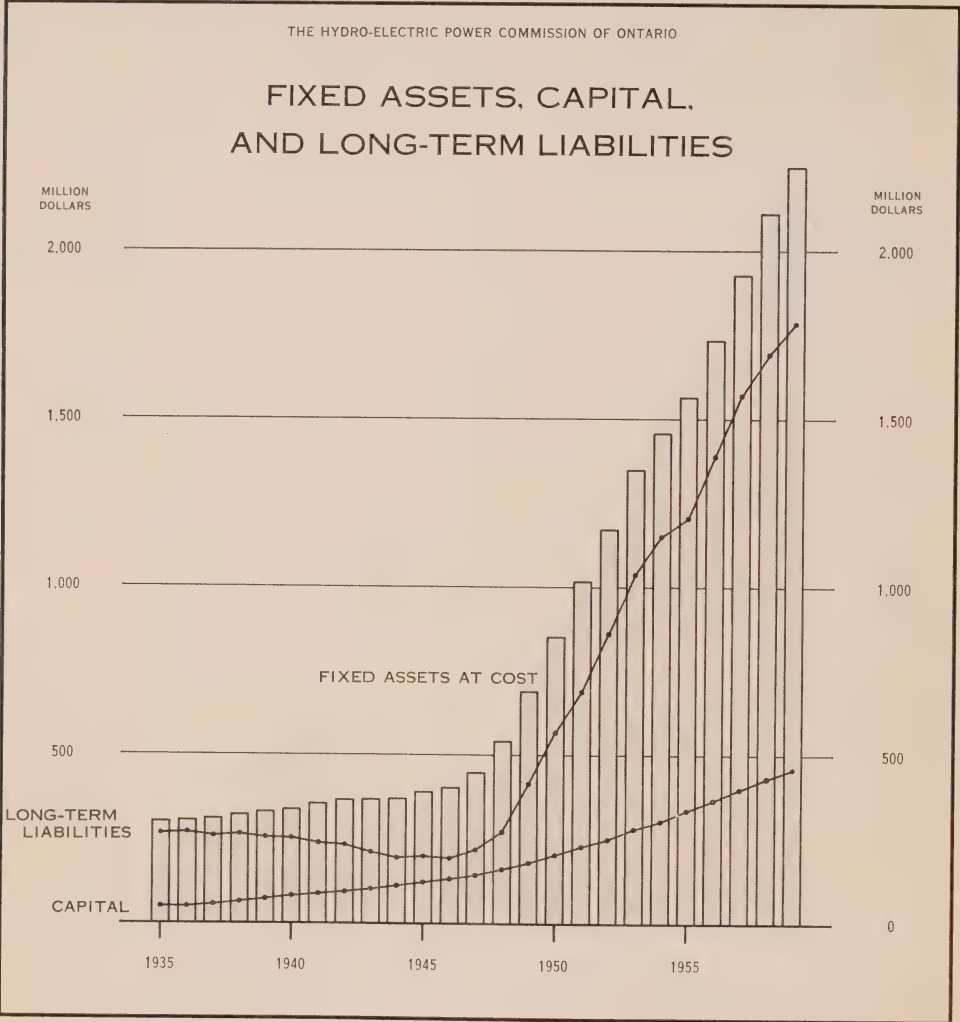
Gross revenues from sales at \$38,715,517 exceeded by 9.8 per cent comparable revenues in 1958. The revenue figure does not include receipts of \$924,279 from the sale of secondary energy since these were used to reduce the cost of power. The total energy provided was 6,253,479,653 kilowatt-hours, the Northern Ontario Properties share of total sales as shown in the table on pages 116 and 117.



In the Northeastern Division, 10 municipal utilities formerly served for the account of the Province became cost-contract customers of the Commission under the terms of The Power Commission Act. The changes were effective at various dates during the year, and the revenue from cost-contract utilities, reflecting these changes, increased by 20.0 per cent by comparison with an increase of only 8.0 per cent for other customers served for the account of the Province, excluding rural service.

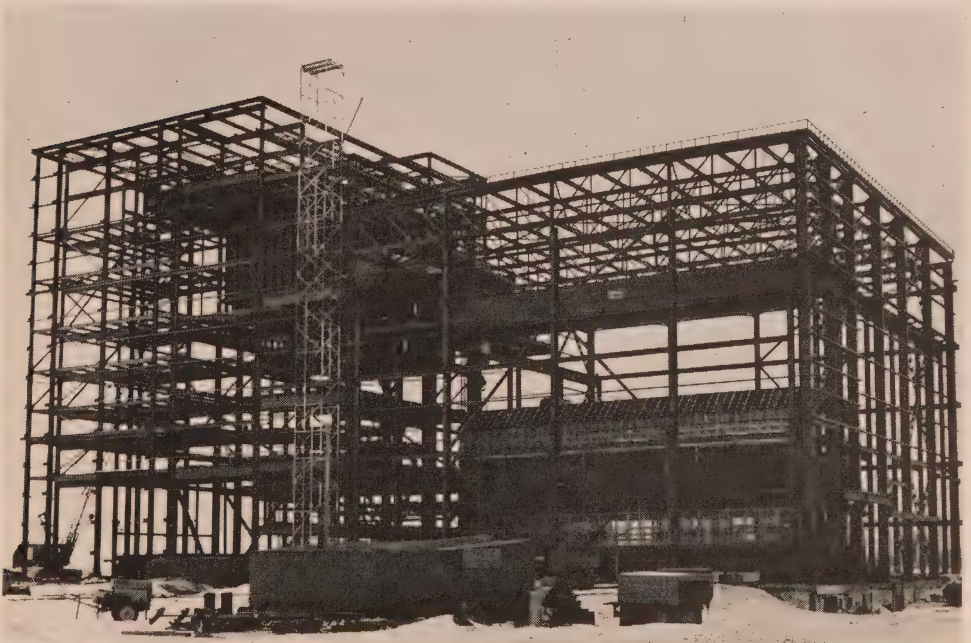
SUMMARY OF FINANCIAL POSITION

Stringency in the money market resulting in high interest rates led the Commission to take energetic steps towards rephasing the capital construction program and to explore every means of conserving working funds. The result has been a reduction in borrowings from \$150 million in 1958 to \$125 million in 1959, and an estimated \$110 million in 1960.





**RED ROCK FALLS GENERATING STATION** — An aerial view of the site of the Commission's newest generating station in northeastern Ontario. Taken in midsummer 1959, it shows construction being carried out behind cofferdams on either side of the sluiceway section.



**THUNDER BAY GENERATING STATION** — The erection of steel for the powerhouse began in September, and by the end of 1959, almost 1,500 tons had been placed in position. Initially the powerhouse will be 360 feet wide, 139 feet long, and 136 feet high, and will house a 100,000-kilowatt steam turbo-generator. If required, the structure can be extended in length to 820 feet to accommodate additional units.

The gross expenditure on fixed assets during the year amounted to \$154,103,729, of which approximately 64 per cent was spent on power generating facilities. More than half the total spent on generating station construction during the year related to the three major thermal-electric stations—Richard L. Hearn, Lakeview, and Thunder Bay Generating Stations. The extension or improvement of rural distribution facilities required the expenditure of \$19,542,527, or approximately 13 per cent of the total gross expenditure on fixed assets. After allowing for sales and retirements amounting to \$13,806,984 there was a net increase of \$140,296,745 in the investment in fixed assets bringing the total to \$2,248,272,379. This total includes \$253,943,834 in rural fixed assets. Accumulated depreciation provided on fixed assets amounted to \$262,753,571 at December 31, 1959, including a special provision charged to frequency standardization and representing anticipated capital losses on 25-cycle power system facilities to be retired, and other adjustments intended to reflect more accurately the expired service life of certain power facilities.

The funds required by the Commission for capital investment and other purposes in 1959 were obtained from sources as shown in the following table.

#### STATEMENT OF SOURCE AND APPLICATION OF FUNDS

for the Year Ended December 31, 1959

	\$ '000 omitted
<b>FUNDS APPLIED:</b>	
Expenditures on fixed assets, \$154,104 less proceeds from sales, etc.....	150,040
Retirement of Commission bonds and repayment of Provincial advances.....	28,537
Expenditures on frequency standardization.....	5,720
Expenditures on nuclear research.....	2,400
Increase in working capital.....	20,628
Total.....	<u>207,325</u>
<b>FUNDS PROVIDED:</b>	
From issue of bonds of \$125 million par value after allowing for exchange discount, and bond issue expense.....	120,144
From operations—	
Southern Ontario System—excess of revenue over cost in serving customers of the Rural Power District.....	1,086
Northern Ontario Properties—deficiency of revenue in serving customers for the account of the Province.....	294
Charges to cost of power not requiring an outlay of cash:	
Provision and interest added to reserves for stabilization of rates and contingencies and sinking fund, and to accumulated depreciation.....	67,049
Provision in year to pay off cost of frequency standardization.....	8,373
Provision in year to meet cost of bond issues, etc.....	2,218
Withdrawal from stabilization of rates reserve.....	1,201
	<u>77,231</u>
From Provincial assistance for rural construction.....	1,324
From reduction in inventories.....	5,832
From other sources.....	2,794
Total.....	<u>207,325</u>



The total assets of the Commission at December 31, 1959, after deducting accumulated depreciation and the intersystem account of \$1,690,580, were \$2,548,267,695 as compared with \$2,421,226,156 at December 31, 1958. The long-term debt at December 31, 1959 was \$1,785,860,536 after making allowance for the \$1,285,204 net of exchange premium and discount on debentures issued in U.S. funds. The corresponding debt at December 31, 1958 was \$1,692,377,247 on the same basis. Net capital of \$461,882,939 at the end of 1959 included \$346,915,152 contributed through sinking fund payments in the cost of power for the purpose of retiring long-term debt, \$114,862,748 in Provincial contributions for assistance in construction of rural distribution facilities, and \$105,039 of surplus arising from operations in the Northern Ontario Properties for service to customers supplied for the account of the Province.



THE HYDRO-ELECTRIC POWER  
SOUTHERN  
BALANCE SHEET

ASSETS

FIXED ASSETS AT COST:

Power System .....	\$ 1,595,190,114	
Administrative and service buildings and equipment: .....	30,527,619	
Rural Power District .....	214,808,102	
	<hr/>	
	\$ 1,840,525,835	
Less accumulated depreciation .....	216,742,259	
	<hr/>	\$ 1,623,783,576

FREQUENCY STANDARDIZATION:

Cost of completed standardization after charging \$146,735,284 to reserves and cost of power—balance to be written off in future years .....	199,353,727
--	-------------

CURRENT ASSETS:

Cash .....	\$ 20,014,782	
Temporary investments in government and government-guaranteed securities, at market value .....	6,000,000	
Accounts receivable .....	27,630,701	
Customers' securities on deposit .....	517,800	
Northern Ontario Properties—current account .....	1,690,580	
	<hr/>	55,853,863

INVENTORIES HELD FOR OPERATION, MAINTENANCE, AND CONSTRUCTION:

Coal at cost .....	\$ 12,742,220	
Other materials and supplies at cost .....	13,642,681	
Tools and equipment at cost less depreciation .....	12,196,898	
	<hr/>	38,581,799

DEFERRED CHARGES AND OTHER ASSETS:

Debenture discount and expense less amounts written off .....	\$ 17,801,492	
Deferred work orders and other assets .....	6,082,828	
	<hr/>	23,884,320

RESERVE FUND INVESTMENTS:

Government and government-guaranteed bonds		
Investments held for special reserves at amortized cost plus accrued interest (approximate market value \$90,118,000)		
Pension fund .....	\$ 102,218,542	
Employer's liability insurance fund .....	3,216,488	
Employees' savings and insurance fund .....	794,432	
Investments held for other reserves at amortized cost (approximate market value \$90,327,000)		
Stabilization of rates and contingencies .....	86,237,682	
Sinking fund .....	14,069,486	
	<hr/>	206,536,630
		<hr/>
		\$ 2,147,993,915

**Auditors' Report**

We have examined the balance sheet of the Southern Ontario System of The Hydro-Electric Power Commission of Ontario as at December 31, 1959, and the statement of operations for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the accompanying balance sheet and statement of operations present fairly the financial position of the Southern Ontario System of the Commission as at December 31, 1959 (subject to the trusts which prevail in respect thereto) and the results of the operations for the year ended on that date.

CLARKSON, GORDON & CO.

Chartered Accountants.

Toronto, Canada,  
June 30, 1960.

COMMISSION OF ONTARIO

**ONTARIO SYSTEM**

**AS AT DECEMBER 31, 1959**

**LIABILITIES, RESERVES, AND CAPITAL**

LONG-TERM LIABILITIES (including \$12,897,995 maturing in 1960):

Funded debt (at par of exchange).....	\$ 1,756,649,000
Less—issued to finance Northern Ontario Properties, a separate trust operated by the Commission.....	283,583,545

\$ 1,473,065,455

Advances from the Province of Ontario (at par of exchange).....	\$30,496,740
Less advances for Northern Ontario Properties.....	5,457,014

25,039,726

\$ 1,498,105,181

Less exchange discount (net) incurred on funded debt payable in United States funds.....	750,037
--	---------

\$ 1,497,355,144

CURRENT LIABILITIES:

Accounts and payrolls payable and accrued charges.....	\$ 25,485,128
Customers' deposits.....	1,078,051
Interest accrued on long-term liabilities.....	16,409,191

42,972,370

SPECIAL RESERVES:

Pension fund.....	\$ 104,226,254
Employer's liability insurance fund.....	3,074,435
Employees' savings and insurance fund.....	833,390

108,134,079

GENERAL RESERVE:

Stabilization of rates and contingencies.....	
---	--

120,528,817

CAPITAL:

Sinking fund reserve:

Represented by—

Funded debt and Provincial advances retired through sinking funds.....	\$269,334,976
Sinking fund investments and cash.....	14,147,440

\$ 283,482,416

Contributed capital:

Province of Ontario, assistance for rural construction...	95,521,089
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379,003,505

\$ 2,147,993,915

NOTE: Commitments under uncompleted contracts for the construction of fixed assets, approximately \$65,000,000.

## NORTHERN ONTARIO

Held and Operated by The Hydro-Electric Power Commission of Ontario in

## BALANCE SHEET

## ASSETS

## FIXED ASSETS AT COST:

Power System.....	\$ 365,448,161	
Administrative and service buildings and equipment.....	3,162,651	
Rural Power District.....	39,135,732	
	<u>\$ 407,746,544</u>	
Less accumulated depreciation.....	46,011,312	
		<u>\$ 361,735,232</u>

## FREQUENCY STANDARDIZATION:

Cost of completed standardization after charging \$1,140,451 to cost of power—balance to be written off in future years..		3,583,659
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## CURRENT ASSETS:

Cash.....	\$ 383,723	
Accounts receivable.....	5,460,709	
Rural Power District grants receivable.....	1,070,777	
Customers' securities on deposit.....	1,488,565	
		<u>8,403,774</u>

INVENTORIES HELD FOR OPERATION, MAINTENANCE, AND  
CONSTRUCTION:

Materials and supplies at cost.....	\$ 1,323,749	
Tools and equipment at cost less depreciation.....	543,193	
		<u>1,866,942</u>

## DEFERRED CHARGES AND OTHER ASSETS:

Debenture discount and expense less amounts written off.....	\$ 3,467,916	
Account receivable in annual instalments 1960-1989.....	1,799,161	
Deferred work orders and other assets.....	891,826	
		<u>6,158,903</u>

## RESERVE FUND INVESTMENTS:

Government and government-guaranteed bonds at amortized cost (approximate market value \$16,497,000)		
Held for—Stabilization of rates and contingencies reserve....	\$ 16,257,569	
Sinking fund reserve.....	3,958,281	
		<u>20,215,850</u>
		<u>\$ 401,964,360</u>

## Auditors' Report

We have examined the balance sheet of the Northern Ontario Properties, held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario and municipalities supplied with power at cost, as at December 31, 1959, and the statements of operations and surplus for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the accompanying balance sheet and statements of operations and surplus present fairly the financial position of the Northern Ontario Properties as at December 31, 1959 (subject to the trusts which prevail in respect thereto) and the results of the operations for the year ended on that date.

CLARKSON, GORDON &amp; CO.

Chartered Accountants.

Toronto, Canada,  
June 30, 1960.

## PROPERTIES

Trust for the Province of Ontario and Municipalities Supplied with Power at Cost  
AS AT DECEMBER 31, 1959

## LIABILITIES, RESERVES, AND CAPITAL

## LONG-TERM LIABILITIES (including \$6,583,796 maturing in 1960):

Funded debt (at par of exchange).....	\$ 283,583,545	
Advances from the Province of Ontario (at par of exchange)....	5,457,014	
	<hr/>	\$ 289,040,559
Less exchange discount (net) incurred on funded debt payable in United States funds.....	535,167	
	<hr/>	\$ 288,505,392
Representing the portion of the funded debt and advances from the Province of Ontario owing by The Hydro-Electric Power Commission of Ontario, issued to finance Northern Ontario Properties.		

## CURRENT LIABILITIES:

The Hydro-Electric Power Commission of Ontario—current account.....	\$ 1,690,580	
Accounts and payrolls payable and accrued charges.....	1,920,429	
Customers' deposits.....	4,793,380	
Interest accrued on long-term liabilities.....	3,245,586	
	<hr/>	11,649,975

## GENERAL RESERVE:

Stabilization of rates and contingencies.....	18,929,559
---	------------

## CAPITAL:

Sinking fund reserve:	
Province of Ontario.....	\$ 50,157,090
Municipalities supplied with power at cost....	13,275,646
	<hr/>
	\$ 63,432,736

## Represented by—

Funded debt and Provincial advances retired through sinking funds.....	\$ 59,573,502
Sinking fund investments.....	3,859,234
	<hr/>
	\$ 63,432,736

## Contributed capital:

Province of Ontario, assistance for rural construction.....	19,341,659	
Surplus arising from supply of power to customers served for the account of the Province of Ontario.....	105,039	
	<hr/>	82,879,434
		<hr/>
		\$ 401,964,360



THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO  
**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF OPERATIONS**  
**for the Year Ended December 31, 1959**

	Power System	Rural Power District	Total
	\$	\$	\$
<b>COST OF PRIMARY POWER:</b>			
Cost of power purchased .....	12,936,538	.....	12,936,538
Operation, maintenance, and administrative expenses .....	51,675,568	12,502,896	64,178,464
Interest (including interest on long-term liabilities and reserves, less interest earned on invest- ments) .....	53,778,810	4,207,635	57,986,445
Frequency standardization (Note):			
Interest .....	7,823,293	.....	7,823,293
Portion of cost written off .....	8,155,021	.....	8,155,021
Depreciation .....	13,035,967	5,786,017	18,821,984
Provision for nuclear research .....	405,065	.....	405,065
Sinking fund provision—contribution to system capital .....	14,921,821	1,162,639	16,084,460
	162,732,083	23,659,187	186,391,270
Interchange of power with Northern Ontario Properties .....	5,028,044	.....	5,028,044
Sale of 60-cycle secondary export energy (Note) ..	3,066,481	.....	3,066,481
Sale of other secondary energy .....	4,846,645	.....	4,846,645
Credit resulting from matured sinking fund .....	589,547	.....	589,547
	149,201,366	23,659,187	172,860,553
Cost of power supplied to Rural Power District ..	18,730,433	18,730,433	.....
Total .....	130,470,933	42,389,620	172,860,553
<b>AMOUNTS BILLED FOR PRIMARY POWER:</b>			
Municipalities (at interim rates) .....	108,316,447	.....	108,316,447
Direct industrial customers and interconnected systems .....	24,070,062	.....	24,070,062
Local distribution system customers .....	103,149	.....	103,149
Rural customers .....	.....	43,475,224	43,475,224
Total .....	132,489,658	43,475,224	175,964,882
Excess of amounts billed over cost .....	2,018,725	1,085,604	3,104,329
Credited to municipalities on annual adjustment ..	2,018,725	.....	2,018,725
Credited to stabilization of rates reserve .....	.....	1,085,604	1,085,604

NOTE : In 1959, proceeds of sales of 60-cycle secondary export energy were deducted from the cost of power, whereas these proceeds previously were included in amounts billed to direct industrial customers and interconnected systems. The provision for frequency standardization includes, as in prior years, an amount (\$2,844,626 in 1959) equal to the net revenue from the sale of this secondary export energy.

NORTHERN ONTARIO PROPERTIES

*Held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario and municipalities supplied with power at cost*

STATEMENT OF OPERATIONS  
for the Year Ended December 31, 1959

	Customers served for the account of the Province of Ontario			Municipalities supplied with power at cost	Total
	Rural Power District	Other customers	Total		
<b>COST OF PRIMARY POWER:</b>	\$	\$	\$	\$	\$
Cost of power purchased.....		572,723	572,723		572,723
Operation, maintenance and administrative expenses.....	2,018,314	13,201,532	15,219,846		15,219,846
Interest (including interest on long-term liabilities and reserves, less interest earned on investments).....	745,191	12,373,785	13,118,976		13,118,976
Frequency standardization:					
Interest.....		187,625	187,625		187,625
Portion of cost written off.....		218,114	218,114		218,114
Depreciation.....	1,040,507	2,760,623	3,801,130		3,801,130
Provision for nuclear research.....		94,935	94,935		94,935
Sinking fund provision—contribution to system capital.....	196,557	3,383,648	3,580,205		3,580,205
	4,000,569	32,792,985	36,793,554		36,793,554
Interchange of power with Southern Ontario System.....		5,028,044	5,028,044		5,028,044
Sale of secondary energy.....		924,279	924,279		924,279
Credit resulting from prepaid and matured sinking funds.....		721,803	721,803		721,803
Withdrawal from general stabilization of rates reserve.....		903,685	903,685		903,685
	4,000,569	35,271,262	39,271,831		39,271,831
Cost of power to municipalities supplied at cost.....		3,342,534	3,342,534	3,342,534	
Cost of power supplied to Rural Power District.....	2,722,194	2,722,194			
Withdrawal from specific stabilization of rates reserve.....				297,324	297,324
Costs after withdrawals aggregating \$1,201,009 from stabilization of rates reserve.....	6,722,763	29,206,534	35,929,297	3,045,210	38,974,507
<b>AMOUNTS BILLED FOR PRIMARY POWER:</b>					
Municipalities supplied with power at cost (at interim rates).....				3,080,071	3,080,071
Fixed-rate municipalities.....		1,892,748	1,892,748		1,892,748
Direct industrial, and other customers.....		24,481,360	24,481,360		24,481,360
Local distribution system customers.....		2,910,612	2,910,612		2,910,612
Rural customers.....	6,350,726		6,350,726		6,350,726
Total.....	6,350,726	29,284,720	35,635,446	3,080,071	38,715,517
Excess or deficiency of amounts billed over cost.....	372,037	78,186	293,851	34,861	258,990
Credited to municipalities on annual adjustment.....				34,861	34,861
Transferred to Statement of Surplus.....			293,851		293,851

Statement of Surplus for the Year Ended December 31, 1959

Balance at credit January 1, 1959.....	\$ 398,890
Deduct balance transferred from Statement of Operations for the year ended December 31, 1959.....	293,851
Balance at credit December 31, 1959.....	\$ 105,039

THE HYDRO-ELECTRIC POWER  
FUNDED DEBT AS AT

Date of maturity	Callable on or after	Date of issue	Interest rate
PAYABLE IN CANADIAN FUNDS—Guaranteed as to principal and interest by the Province of Ontario:			
January 1, 1960	January 1, 1955	January 1, 1945	per cent 3
February 15, 1962	.....	February 15, 1957	4¾
March 1, 1963	March 1, 1961	March 1, 1948	3
March 1, 1963	March 1, 1962	March 1, 1955	3
October 15, 1963	.....	October 15, 1958	4
May 15, 1964	May 15, 1962	May 15, 1954	3
May 15, 1964	.....	November 15, 1957	5
July 2, 1964	July 2, 1960	July 2, 1948	3
October 15, 1964	October 15, 1963	October 15, 1956	4½
April 1, 1965	April 1, 1964	April 1, 1957	5
December 15, 1965	December 15, 1963	December 15, 1948	3
January 15, 1966	January 15, 1964	January 15, 1956	3¾
March 1, 1966	March 1, 1965	March 1, 1958	4
May 1, 1966	May 1, 1964	May 1, 1951	3½
January 15, 1967	January 15, 1965	January 15, 1952	4
March 15, 1967	March 15, 1964	March 15, 1953	4¼
April 1, 1967	April 1, 1964	April 1, 1947	2¾
April 1, 1967	April 1, 1965	April 1, 1949	3
November 1, 1967	November 1, 1964	November 1, 1952	4¼
November 1, 1967	November 1, 1964	November 1, 1952	4¼
January 15, 1968	January 15, 1966	July 15, 1949	3
April 15, 1968	April 15, 1966	April 15, 1952	4
October 1, 1968	October 1, 1965	October 1, 1947	2¾
July 1, 1969	.....	July 1, 1959	5¾
July 15, 1969	July 15, 1966	July 15, 1953	4¼
July 15, 1969	July 15, 1966	July 15, 1953	4¼
November 1, 1969	November 1, 1967	November 1, 1949	3
January 1, 1970	.....	January 1, 1930	4¾
April 1, 1970	April 1, 1968	April 1, 1950	3
October 15, 1970	October 15, 1969	October 15, 1958	4½
June 1, 1971	June 1, 1961	June 1, 1946	2¾
June 15, 1973	June 15, 1971	June 15, 1950	3
July 15, 1974	July 15, 1972	July 15, 1956	4
October 15, 1974	October 15, 1972	October 15, 1956	4½
August 15, 1975	August 15, 1972	February 15, 1957	4¾
January 15, 1976	January 15, 1974	January 15, 1956	4
November 15, 1976	November 15, 1974	November 15, 1957	5
March 1, 1977	March 1, 1975	March 1, 1955	3½
April 1, 1977	April 1, 1974	April 1, 1957	5
March 1, 1978	March 1, 1976	March 1, 1958	4½
October 15, 1978	October 15, 1976	October 15, 1958	5
May 15, 1979	May 15, 1974	May 15, 1954	3½
July 1, 1979	.....	July 1, 1959	5¾
October 15, 1979	October 15, 1974	October 15, 1954	3½

PAYABLE IN UNITED STATES FUNDS—Held by Province of Ontario and having terms identical with			
March 15, 1960	March 15, 1959	March 15, 1954	2.60
March 15, 1961	March 15, 1959	March 15, 1954	2.65
March 15, 1962	March 15, 1959	March 15, 1954	2.70
March 15, 1963	March 15, 1959	March 15, 1954	2¾
March 15, 1964	March 15, 1959	March 15, 1954	2.80
May 15, 1971	May 15, 1956	May 15, 1951	3¼
September 1, 1972	September 1, 1956	September 1, 1951	3¼
February 1, 1975	February 1, 1958	February 1, 1953	3¼
November 1, 1978	November 1, 1958	November 1, 1953	3⅝
March 15, 1980	March 15, 1959	March 15, 1954	3⅞
May 15, 1981	May 15, 1961	May 15, 1956	3⅞
February 1, 1984	February 1, 1969	February 1, 1959	4¾

Total funded debt (at par of exchange).....

Summary of changes in funded debt

Outstanding at January 1, 1959.....	
Less redemptions during year.....	
Add new bond issues during year.....	
Outstanding at December 31, 1959.....	

## COMMISSION OF ONTARIO

DECEMBER 31, 1959

Principal outstanding December 31, 1959		
Southern Ontario System	Northern Ontario Properties	Total
\$	\$	\$
.....	3,783,000	3,783,000
8,496,500	2,990,000	11,486,500
23,234,000	7,343,000	30,577,000
22,936,000	.....	22,936,000
13,020,000	6,700,000	19,720,000
13,187,500	902,000	14,089,500
3,589,500	9,598,000	13,187,500
26,157,500	13,371,500	39,529,000
13,024,500	.....	13,024,500
16,427,500	1,716,000	18,143,500
43,432,500	.....	43,432,500
11,693,000	2,016,500	13,709,500
31,210,500	6,157,500	37,368,000
22,920,000	5,011,000	27,931,000
46,697,500	412,500	47,110,000
35,985,000	.....	35,985,000
10,678,455	3,996,545	14,675,000
11,363,000	32,244,000	43,607,000
32,736,000	.....	32,736,000
20,246,500	1,812,000	22,058,500
37,000,000	6,300,000	43,300,000
45,988,500	.....	45,988,500
13,450,000	5,800,000	19,250,000
10,000,000	3,000,000	13,000,000
34,124,000	.....	34,124,000
24,829,000	.....	24,829,000
38,000,000	11,500,000	49,500,000
11,697,500	.....	11,697,500
48,263,000	5,300,000	53,563,000
3,700,000	1,800,000	5,500,000
13,745,000	4,290,000	18,035,000
52,000,000	2,300,000	54,300,000
42,670,000	7,000,000	49,670,000
26,740,000	.....	26,740,000
25,300,000	12,000,000	37,300,000
42,500,000	7,500,000	50,000,000
10,875,000	25,230,000	36,105,000
27,000,000	13,000,000	40,000,000
73,500,000	7,900,000	81,400,000
30,100,000	6,400,000	36,500,000
33,000,000	16,500,000	49,500,000
31,500,000	3,500,000	35,000,000
28,000,000	9,000,000	37,000,000
41,975,000	8,000,000	49,975,000
<u>1,152,992,455</u>	<u>254,373,545</u>	<u>1,407,366,000</u>

issues sold in the United States by the Province of Ontario on behalf of the Commission:

263,000	.....	263,000
808,000	.....	808,000
3,603,000	.....	3,603,000
2,825,000	.....	2,825,000
2,890,000	.....	2,890,000
46,503,000	2,890,000	49,393,000
43,307,000	.....	43,307,000
47,811,000	.....	47,811,000
44,010,000	5,000,000	49,010,000
29,920,000	.....	29,920,000
41,133,000	3,320,000	44,453,000
57,000,000	18,000,000	75,000,000
<u>320,073,000</u>	<u>29,210,000</u>	<u>349,283,000</u>
<u>1,473,065,455</u>	<u>283,583,545</u>	<u>1,756,649,000</u>

during year ended December 31, 1959

\$1,388,008,955	\$258,227,045	\$1,646,236,000
9,943,500	4,643,500	14,587,000
<u>\$1,378,065,455</u>	<u>\$253,583,545</u>	<u>\$1,631,649,000</u>
95,000,000	30,000,000	125,000,000
<u>\$1,473,065,455</u>	<u>\$283,583,545</u>	<u>\$1,756,649,000</u>



THE HYDRO-ELECTRIC POWER  
ADVANCES FROM THE PROVINCE OF

*Repayable to the Province in accordance with the terms of Province*

Date of maturity		Description	Interest rate
			per cent
May	15, 1960-1968.....	Annuity bonds	4
May	15, 1960-1970.....	Annuity bonds	4½
January	15, 1960-1971.....	Annuity bonds	4½
June	1, 1960-1971.....	Annuity bonds	4
December	2, 1960.....	Bonds	5
Total advances (at par of exchange).....			

Summary of changes in advances from the Province

Balances of advances at January 1, 1959.....	
Less repayments during year.....	
Balances of advances at December 31, 1959.....	

## COMMISSION OF ONTARIO

## ONTARIO AS AT DECEMBER 31, 1959

*of Ontario bonds issued in part for the purposes of the Commission*

Balances of advances outstanding December 31, 1959 (Payable in Canadian, United States, or Sterling funds)		
Southern Ontario System	Northern Ontario Properties	Total
\$	\$	\$
4,449,232	300,496	4,749,728
3,929,093	952,207	4,881,300
2,272,903	558,320	2,831,223
2,878,202	1,062,184	3,940,386
11,510,296	2,583,807	14,094,103
25,039,726	5,457,014	30,496,740

## of Ontario during year ended December 31, 1959

\$37,248,432	\$7,993,994	\$45,242,426
12,208,706	2,536,980	14,745,686
\$25,039,726	\$5,457,014	\$30,496,740

## SECTION III

### THE COMMISSION'S CUSTOMERS

**I**N the fulfilment of the Commission's continuing program of sales promotion to which reference was made in the Chairman's letter of transmittal for the 1958 Annual Report, a Sales Promotion Division was established in the Head Office organization early in 1959. Departments specializing in commercial-industrial, farm, and residential sales, market analysis, and sales training give their full attention to the objectives of the program and provide guidance and assistance to field forces engaged in sales promotion activity in the regions. Shortly thereafter the name of the former Administration Branch was changed to Production and Sales Branch. It now includes the Consumer Service, Operations, Sales Promotion, and Security Divisions.

#### **Sales Promotion Activity in 1959**

Following the initial stages of organization and the engagement of a basic staff with a background of experience in selling, market analysis, and sales training, special educational and promotional programs were developed for presentation to residential, commercial, farm, and industrial customers. The free exchange of information and advice has enabled the Commission, the municipal utilities, and the manufacturers and distributors of electrical appliances to move forward on a co-ordinated sales promotion plan. Special emphasis is being given to the

promotion of electric water-heating and space-heating, but other aspects of the economy, convenience, and comfort of electrical living are not being overlooked. Advertising has been carried by the daily and weekly press, on radio and television, and other media appropriate for the purpose. During the year the Commission's new mobile display coach effectively presented the "Live Better Electrically" campaign at exhibitions and fall fairs and at curb-side demonstrations outside Commission and municipal utility offices. In some respects the coach is a modern counterpart of the "Adam Beck circus" that toured the Province in the days when electrical service was relatively new. By contrast with its early predecessor, the modern coach displays the great variety and completeness of the service now available. In addition to an all-electric kitchen, it contains displays of other home, farm, and workshop equipment, including house-heating and water-heating equipment, electric motors, and power tools.



The Commission's demonstration coach emphasizes the electrical way of living. Over 50 feet in length and carrying a wide range of electrical appliances, it was inspected in 1959 by 110,000 visitors at 67 different locations throughout Ontario.

The Hydro building at the Canadian National Exhibition in Toronto featured an all-electric home, designed to meet the requirements of the electrical industry's Gold Medallion home. This medallion standard, in addition to specified requirements in wiring and circuit arrangement, includes electric heating and the incorporation of at least three major appliances such as water-heater, range, washer, dryer, and refrigerator. Such standards, which ensure a high degree of comfort, convenience, and safety in the home, are being vigorously promoted with builders, contractors engaged in construction in planned subdivisions, as well as with home owners.

An important outcome of the promotional activity in electric heating was the organization of the Electric Heating Association of Ontario following a series of conferences with representatives of manufacturers, distributors, and electrical contractors. House-heating installations that conform with standards established by the Association have met with unqualified customer satisfaction. At the end of the year, 354 houses were heated entirely by electricity and there is every expectation that the number will be substantially increased by the end of 1960. In addition, electric heating is being installed in a number of schools, apartment buildings, motels, and other public buildings.

The campaign to increase the use of flat-rate water-heaters in rural areas has also been markedly successful, largely as the result of the Commission's offer of rental units to its customers. Almost 15,000 water-heaters were installed during 1959.



During the year, over a hundred schools in the Province received assistance under a co-ordinated plan to equip home economics classrooms with the best in major electrical appliances. The plan, arranged in co-operation with the appliance manufacturers, is designed to acquaint young people with the manifold advantages of the well-equipped electrical home.

#### **Deliveries of Power in Wholesale Quantities**

During 1959 the Commission delivered in bulk 32,291,081,869 kilowatt-hours of electric energy to municipal systems, interconnected utility systems, the rural operating areas, and direct industrial customers. This represents an increase of 11.9 per cent over deliveries in 1958. Deliveries of energy were made in 1959 as follows: 52.5 per cent to the municipal electrical utilities and the local systems owned and operated by the Commission, 8.2 per cent to the rural operating areas, 27.6 per cent to the Commission's direct industrial customers, and 11.7 per cent to certain interconnected utilities for resale. The energy delivered to the direct industrial customers and the interconnected utilities included 8,966,838,533 kilowatt-hours of primary and 3,718,607,550 kilowatt-hours of secondary energy. Comparative figures for wholesale deliveries in 1958 and 1959 appear in the table on page 115, and the supplementary table on page 116 traces the distribution of these kilowatt-hours to ultimate customers served by the Commission and the associated municipal utilities.

The commentary that follows is confined, with one exception, to the wholesale aspects of the Commission's sales. The exception is the analysis of rural distribution which is included with the report on bulk supply to the rural operating areas so that the Commission's rural service may be viewed in its entirety. Supporting statistics for this commentary, the schedule of rates and a brief description of the classes of service, are in Appendix III. Retail distribution of electricity by the municipal utilities and Commission-owned local distribution systems is the subject of the municipal service supplement beginning on page 187. The number of ultimate customers served by the Commission and the associated municipal utilities in 1959 was 1,830,453.

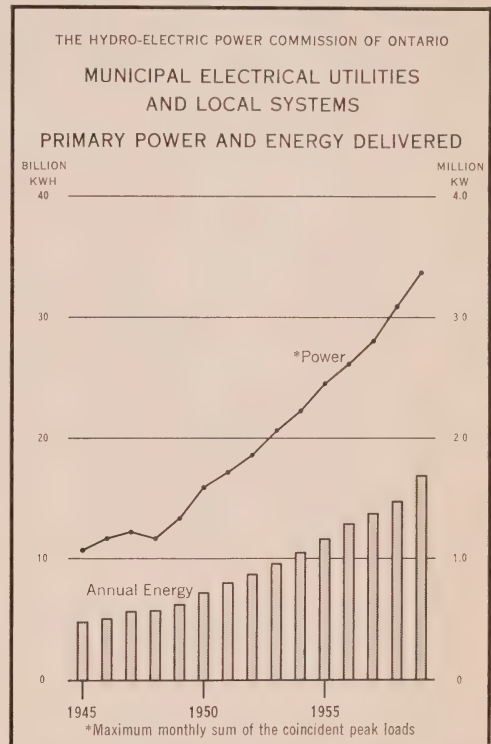
### **MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS**

A total of 382 municipal systems were being served by the Commission's transmission line network at the end of 1959. The town of Campbellford and the village of Avonmore became cost-contract customers of the Commission on July 1 and October 1 respectively. Both municipalities had been receiving power previously from the Commission, Campbellford on a temporary basis and Avonmore through rural service. Following annexation of the areas, service to the village of Bronte was taken over on January 1, 1959 by Trafalgar Township Public Utilities Commission, and service to the town of La Salle by the Sandwich West Township Hydro System. The number of municipalities served under cost contract in the Southern Ontario System remained 327. Ten utilities,

formerly served in the Northeastern Division of the Northern Ontario Properties under fixed-rate contracts, became cost-contract customers during 1959. They were Cache Bay, Capreol, Cochrane, Kapuskasing, Larder Lake Township, Latchford, McGarry, North Bay, Sturgeon Falls, and Thessalon. Together with the eight cost-contract utilities in the Northwestern Division they bring the total number of utilities served at cost in the Northern Ontario Properties to 18, and the combined system total to 345. An additional 9 utilities in the Northern Ontario Properties were served under fixed-rate contracts. The number of local systems served in the Province as a whole was reduced from 29 to 28 when Ignace was transferred to supply by rural facilities.

The municipal utilities are billed monthly at an interim rate per kilowatt of peak load. The monthly peak load for a municipal utility is the maximum average demand over a period of twenty consecutive minutes in the month. As the system peak load usually occurs in December, the peak loads for that month are given for municipal systems in the table of load statistics in Appendix I. The sum of these loads in 1959 was 3,368,571 kilowatts, an increase of 8.1 per cent over the 3,117,381 kilowatts supplied in 1958. The energy supplied to the municipal utilities and local systems in 1959 was 16,950,730,294 kilowatt-hours, an increase of 13.8 per cent over the 14,889,000,611 kilowatt-hours supplied in 1958.

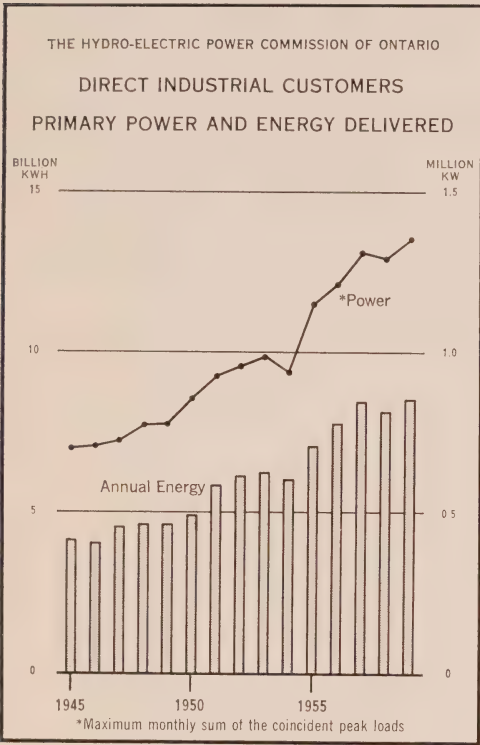
The identity of the utilities as separate units is preserved in the tables of operating statistics and financial reports that form the larger part of the municipal service supplement beginning on page 196. The books of account from which the financial information is derived are kept by the utilities in accordance with a standard accounting system designed by the Commission for use by all utilities served under cost or fixed-rate contracts. These records are periodically inspected by the Commission's municipal accountants and from time to time adjustments and improvements in accounting and office routine are recommended as the requirements of standardized methods may dictate. This type of work or supervision is directed towards ensuring the correct application of the standard accounting procedure and the uniform classification of revenues and expenditures, but it does not constitute an audit of the accounts.



DIRECT INDUSTRIAL CUSTOMERS  
AND INTERCONNECTED SYSTEMS

The industrial customers served directly by the Commission include mines in relatively isolated areas, and industrial customers of many types whose requirements for power may exceed the supply capability of the local rural or municipal facilities. In addition, the Commission has contracts governing the supply or the interchange of power with certain independent utilities both within and beyond the borders of the Province. Prior to 1958, sales to these inter-

connected systems were included in a miscellaneous category with sales to industrial customers. As power utilities they are not industrial customers of the Commission in the generally accepted sense. They are, therefore, no longer included in the table of power and energy supplied to industrial customers and their loads have been deleted from the historical chart on this page. The number of direct industrial customers being supplied by the Commission at December 31, 1959 was 214 as compared with 205 at December 31, 1958.



The sum of the coincident primary peak loads of the Commission's industrial customers reached a monthly maximum of 1,352,923 kilowatts in November 1959, thereby registering an increase of 4.6 per cent over the January 1958 maximum of 1,292,918 kilowatts. The annual kilowatt-hour consumption in 1958 and 1959 is given by types of industry in the accompanying table, together with comparative figures for both

years on peak loads. Since the peak loads in any one month do not offer a satisfactory basis for comparing the activity of one industry with that of another, the table gives the average of the monthly peak loads for each type of industry.

Analysis of Primary Loads by Types of Industry

Total primary energy consumption by industrial customers served directly by the Commission resumed a moderate upward trend following a period of general decline in 1958. The sharpest increases occurred in the abrasives and the steel and metallurgical industries. The latter, after two years of falling consumption reflecting in part the effect of labour unrest in the industry, showed a rate of growth comparable with the best in many years, but has not yet regained ground lost since the industry's year of high consumption in 1952. The increase in base-metal mining load reversed the effect of a major strike in the industry



### Primary Power and Energy Supplied to Direct Industrial Customers, by Types of Industry

Type of industry	Average of the monthly peak loads		Annual energy delivered		Increase or decrease  per cent
	1958	1959	1958	1959	
	kw	kw	kwh	kwh	
Pulp and Paper.....	303,672	321,417	2,055,636,239	2,106,173,551	2.5
Mining:					
(a) Gold.....	87,544	88,216	585,592,708	588,023,334	0.4
(b) Silver and Cobalt.....	3,741	3,350	19,523,266	16,996,035	12.9
(c) Base Metals.....	197,466	229,890	1,302,267,006	1,579,973,022	21.3
(d) Uranium.....	87,455	100,636	591,132,117	689,320,107	16.6
(e) Non-metals.....	6,495	6,623	28,598,881	30,070,386	5.1
Quarrying, Cement, and Basic Building					
Materials.....	40,539	37,748	234,504,442	218,196,911	7.0
Steel and Electro-metallurgical.....	126,240	149,866	635,276,469	833,844,337	31.3
Abrasives.....	52,809	67,883	403,893,727	542,296,500	34.3
Chemical, Electro-chemical, and Cyanamid....	209,854	172,417	1,614,423,720	1,321,705,925	18.1
Grain Elevators and Milling.....	8,232	8,426	31,524,890	30,814,786	2.3
Transportation Services and Communications..	7,806	7,151	32,192,107	32,861,526	2.1
Government Services and Institutions.....	22,300	24,267	128,294,169	140,380,176	9.4
General Manufacturing.....	96,441	82,435	419,565,834	382,018,501	9.0
Miscellaneous.....	7,073	5,521	35,471,660	26,979,934	23.9
Total.....	1,257,667	1,305,846	8,117,897,235	8,539,655,031	5.2

in 1958, and established a new maximum in annual energy consumption for this sector of the mining community. The apparent decline of 18.1 per cent in consumption in the chemical and electro-chemical industry is largely the effect of the transfer of one of the Commission's major industrial customers to service by a municipal electrical utility. If this customer had been served directly by the Commission in 1959, this industrial group would have shown a very satisfactory increase in energy consumption. General manufacturing, and the quarrying, cement, and basic building materials industry continued with some slight acceleration the declines they experienced in 1958, but other industrial groups showed some growth in load over 1958.

The corresponding primary peak and energy loads of the interconnected systems were 59,924 kilowatts in 1959 as compared with 57,403 kilowatts in 1958, and 427,183,502 kilowatt-hours in 1959 as compared with 422,991,041 kilowatt-hours in 1958. The peak load was higher than the 1958 peak by 4.4 per cent, and the energy load was higher by 1.0 per cent.

#### Secondary Energy Sales

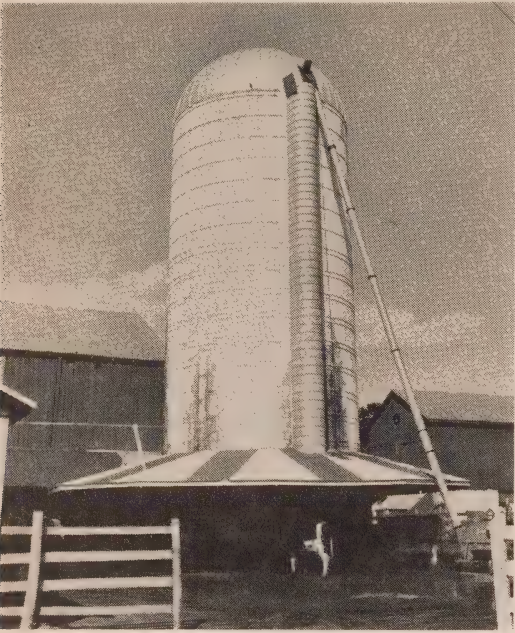
Sales of secondary energy amounted in total to 3,718,607,550 kilowatt-hours, 3,357,968,650 kilowatt-hours being delivered to interconnected systems and 360,638,900 kilowatt-hours to direct industrial customers.

#### RURAL ELECTRICAL SERVICE

There was a net increase of 913 miles in rural primary distribution lines in service during 1959 as compared with an increase of 1,063 miles in 1958. A slower rate of construction in the Northern Ontario Properties was primarily



responsible for the difference. The net increase in number of customers served, at 18,467, was very little short of the 1958 increase of 18,992, the accelerated growth in the Southern Ontario System being almost sufficient to offset the decline in rate in the north.



From this silo a farmer can feed 75 cows by pushing a button. Four hundred tons of ensilage stored here can be fed by electrically operated equipment into the manger under the projecting protective covering.

Municipal annexations did not have so conspicuous an effect on rural operations in 1959 as they had in 1958 when there was a net reduction of nearly 5,000 rural customers in one region. The largest increases in numbers of customers in 1959 occurred in the Georgian Bay, Eastern, and North-eastern Regions; of the total increase of 18,467 customers, all systems, 89.3 per cent received a domestic type of service.

At the end of the year, 491,070 customers were being served over 47,351 miles of rural primary distribution lines. Farm service represented 28.7 per cent of the total number served,

hamlet and rural residential service 44.5 per cent, and summer cottage service 18.6 per cent.

**Rural Power District**  
**NET INCREASE IN MILEAGE OF PRIMARY LINES AND NUMBER OF CUSTOMERS DURING 1959**

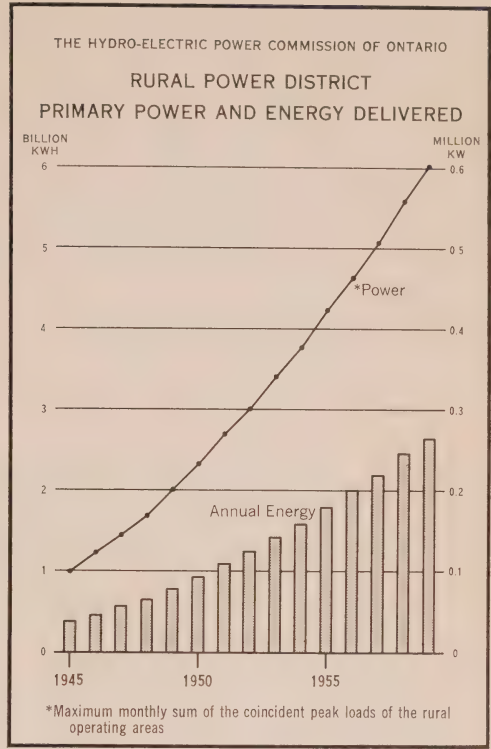
System and Region	Miles of primary line	Number of customers							
		Farm	Residential		Com-mercial	Summer		Power	Total
			Rural	Hamlet		Com-mercial	Other		
SOUTHERN ONTARIO SYSTEM									
Western.....	6.24	13	211	624	130	2	150	27	1,157
West Central.....	31.16	5	232	1,044	126	5	205	23	1,630
Niagara.....	19.76	38	19	1,131	155	4	94	22	1,387
Toronto.....	26.68	14	197	1,028	83	3	47	31	1,375
Georgian Bay.....	184.04	158	622	644	147	71	2,116	12	3,770
East Central.....	191.12	118	283	442	4	71	1,708	10	1,744
Eastern.....	189.66	246	310	1,848	128	20	691	35	3,278
Total.....	648.66	478	1,874	5,877	765	176	5,011	160	14,341
NORTHERN ONTARIO PROPERTIES									
Northeastern.....	197.81	116	275	1,984	139	21	602	38	3,175
Northwestern.....	66.37	45	191	516	94	15	166	14	951
Total.....	264.18	71	466	2,500	233	36	768	52	4,126
Total—All systems.....	912.84	549	2,340	8,377	998	212	5,779	212	18,467

Italic figures indicate decreases.

### Load Growth

The monthly sum of the coincident peak loads of the 102 rural operating areas was 602,220 kilowatts in December 1959, an increase of 7.9 per cent over the 558,366 kilowatts in December 1958. Energy supplied to the areas during the year rose by 6.9 per cent from 2,482,696,066 kilowatt-hours in 1958 to 2,654,905,492 kilowatt-hours in 1959.

Increases in energy consumption were established by all five classes of rural service, all but industrial power service being in the range of 8.8 to 9.4 per cent. In all services but industrial power and summer service the general increase in consumption was accompanied by a notable increase in average monthly consumption per customer; since this normally implies greater consumption of kilowatt-hours at the lower promotional rates, it is

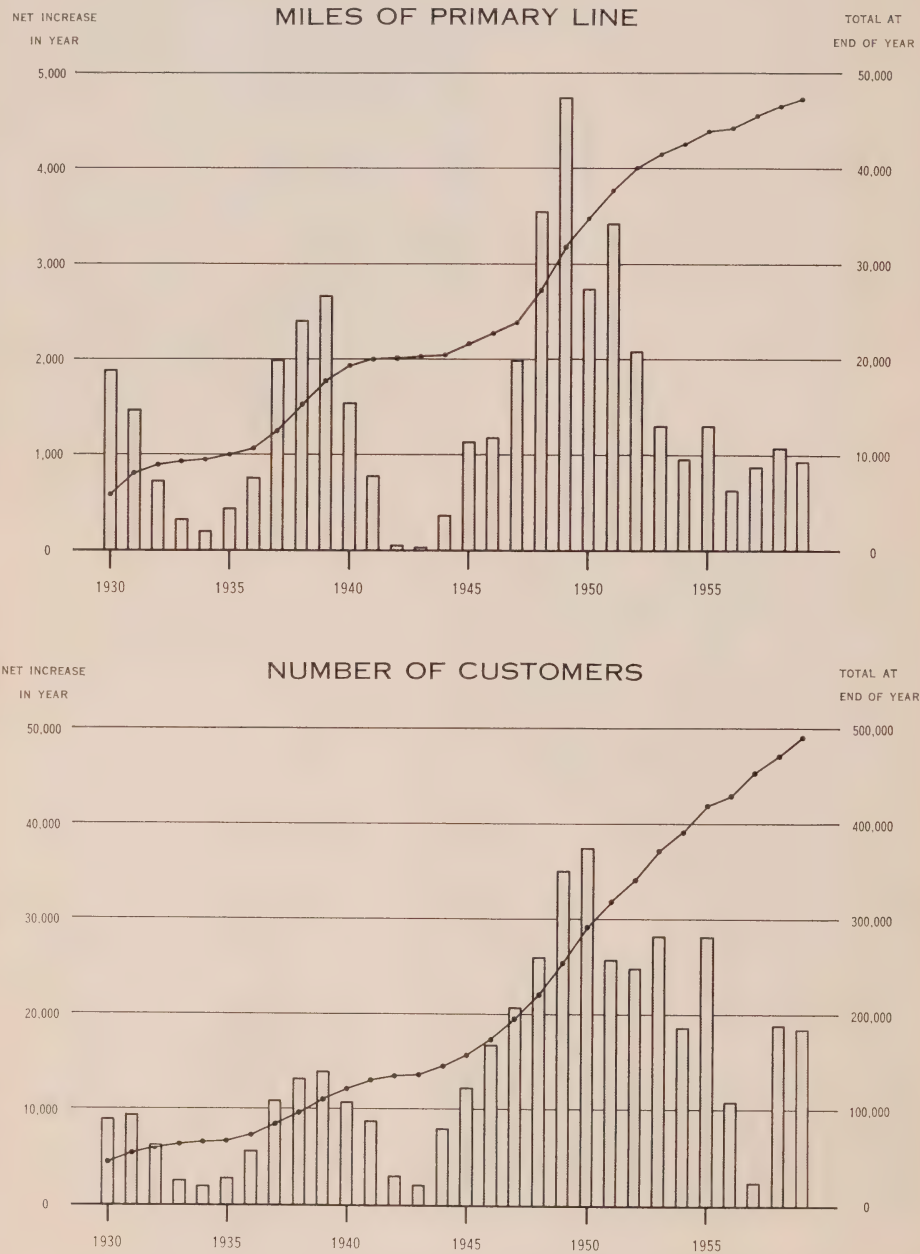


An electrically operated feeder facilitates the work of poultry farming. Feeding troughs are automatically replenished at regular intervals each day by the use of this time-clock-controlled storage bin.

reflected generally in declines in average cost per kilowatt-hour. Industrial power service, in which there was a 10 per cent increase in number of customers but only a 3.4 per cent increase in energy consumption, produced a 4.6 per cent increase in revenue, and with the decline in average consumption per customer, a slight variation upward in average cost per kilowatt-hour. It should be pointed out that the estimated consumption by flat-rate water-heaters, which is billed at low rates, is included in the calculation of these averages, and that the historical table on page 179 has been revised this year allowing for an estimated 16.8 hours' use of flat-rate heaters per day rather than 20 hours' use as heretofore.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

RURAL POWER DISTRICT





### Capital Investment

The net increase in the investment in rural distribution facilities at cost was \$15,035,287 in 1959. Out of a total investment in rural facilities of \$253,943,834 at the end of 1959, the Province had contributed \$114,862,748.

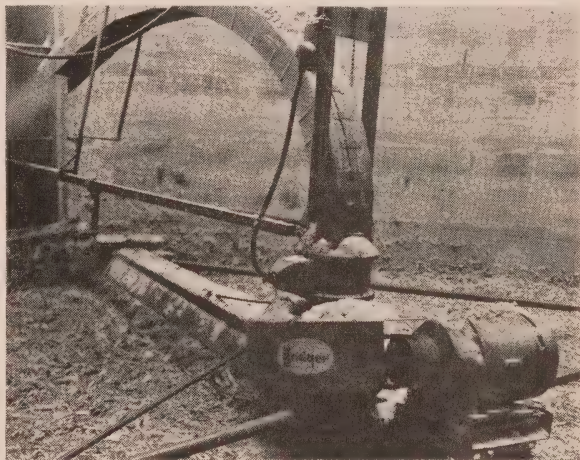
## REPORTS FROM THE REGIONS

### Western Region

The water-heater rental program in operation in municipalities in the Western Region during the year resulted in a considerable increase in the number of units installed. In Norwich a wired radio-control system for water-heaters was placed in service to provide for peak control of the water-heater load in the municipality. Lower rates for fast-recovery flat-rate water-heaters were established in 29 municipalities in the region. Twenty municipalities established house-heating rates during the year, an indication of the growing interest in electric house-heating. Evidence of successful operation is revealed in general rate reductions which were put into effect by 17 municipal utilities.

Municipal electrical utilities in the Western Region in 1959 continued to improve and extend their distribution facilities to meet steadily increasing demands for power. In Sandwich West Township a new 5,000-kva substation was installed to provide greater transformer capacity, and in Chatham, where 1,850 customers were added through annexation procedures, a 3,000-kva, bungalow-type substation was placed in service in the northern section of the city. An additional 2,000 kva of capacity was also provided in the western section of Chatham during 1959. In Windsor, four municipal substations were modernized with the installation of automatic reclosing equipment and a new 5,000-kva substation was under construction to serve domestic and commercial customers. Transformer capacity was also increased in Essex where a 3,000-kva substation was purchased from the Commission by the municipality, and in London where a further 4,500 kva was provided in the downtown section of the city. The new primary network in London, a two-year project, was nearly completed.

General improvements to distribution facilities were carried out also in St. Thomas, Sarnia, and Tillsonburg during 1959. A number of municipalities



Ensilage is fed by an electric unloader to a revolving manger located at the foot of the silo. The back-breaking work of feeding cattle is taken over by electricity at a cost of only 8 cents per ton of fodder handled.

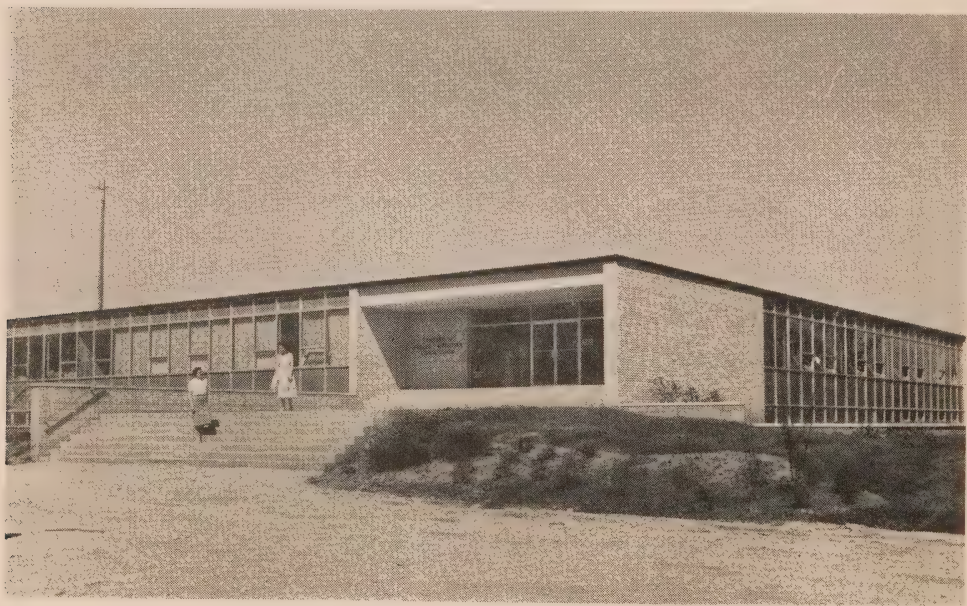


in the region modernized their street-lighting systems, particularly in the business sections and on main thoroughfares. Mercury-vapour lighting units were installed at Arkona, Dresden, Ingersoll, and Sarnia, while fluorescent lighting was installed in Erieau, Erie Beach, and Essex. In St. Thomas a long-term program of converting series-type street lighting to multiple-type was continued. In Kingsville the offices of the municipal electrical utility were rehabilitated and wired throughout for electric heating. Even the pavement in front of the building will be electrically heated in winter to keep it clear of snow. New building and administrative facilities were provided at Dresden and at Windsor.

### **West Central Region**

In the West Central Region, municipal electrical utilities vigorously promoted the use of electricity for water-heating and space-heating in 1959. During the year a further 18 municipalities instituted water-heater rental programs with good results. A number of electrically heated buildings were constructed in various municipalities in the region, including a 15-unit motel at Goderich. As an effective demonstration of an important aspect of its sales program, the Public Utilities Commission of Clinton equipped its new office building with electric space-heating. Effective promotion of the increased use of electricity has enabled 11 municipal utilities to introduce general decreases in rates to their customers.

Loads in the region continued to grow substantially during 1959, and in several municipalities it was necessary to expand the distribution facilities by extensions, improvements, and municipal substation construction. Utilities in Burlington, Dundas, Hamilton, Palmerston, and Simcoe added to their transformation facilities. Further transformer capacity became available in the region



The new offices and service headquarters of Trafalgar Public Utilities Commission

also when industrial customers in Acton, Burlington, Elmira, Hamilton, and Preston placed in service their own substations. An additional 1,000 kva was provided for McMaster University in Hamilton to supply an atomic reactor operated for research purposes. Extensive changes to improve municipal distribution systems were under way in Brantford Township, Clifford, Dublin, Hagersville, Hamilton, Paris, Stoney Creek, and Waterford. Street-lighting systems were modernized in Ayr, Brussels, Cayuga, Delhi, Dundas, Hamilton, Simcoe, and Stratford.

### **Niagara Region**

The number of customers served by municipal electrical utilities in the Niagara Region in 1959 increased by approximately 2.5 per cent with a consequent increase in demands for electricity. To meet these demands, improvements and extensions were carried out generally to distribution systems in most municipalities throughout the region.

Municipal utilities took every opportunity to stress the advantages of using electricity, particularly for the heating of houses and other residential purposes. The introduction of water-heater rental programs by 8 municipalities, together with the favourable rates established for electric space-heaters in 12 municipalities, reinforced the message of electrical living. In the course of the year, electric heating service was provided for 32 houses, an apartment block, and a school.

### **Toronto Region**

Growth in population and electrical loads with a consequent need for increased transformation and distribution facilities continued to be of major concern to almost all the municipal electrical utilities in the Toronto Region in 1959. Load growth in the Townships of North York and Scarborough, although not quite as rapid as in 1958, required a substantial increase in transformation capacity, including the construction of a total of 11 substations. The number of customers supplied by these two municipal utilities alone increased during the year by more than 14,600. Similar trends in loads and customers were evident in other municipalities throughout the region, and by the end of 1959 more than 22,000 customers in all had been added to the number being served. In spite of this rapid expansion, five utilities were able to introduce rate decreases during the year.

The general expansion of distribution systems in most municipalities included the placing of distribution facilities underground in new housing subdivisions in Etobicoke Township, Toronto, and Toronto Township. Secondary services in a new subdivision in Brampton will similarly be installed underground. The underground conduit system in Toronto and Leaside was extended during the year by the installation of 29 miles of duct and 13 underground transformer vaults. The combined peak demand for these two municipalities in February, 1959 amounted to 591,622 kilowatts, an increase over the peak demand in 1958 of 3.8 per cent. The improvement to low-voltage facilities carried out in Toronto to supply the increased demands included the installation of 18,500 kva of transformer capacity.





Throughout Ontario, neat modern offices are located in rural operating areas to serve Commission customers.

Early in the year the municipalities in this region began a sales promotion campaign. Water-heater rental and service plans were put into effect by municipal electrical utilities in Markham, Oakville, Port Credit, Scarborough Township, and Woodbridge. A total of 67 houses throughout the region and several commercial buildings were equipped with electric heating.

### **Georgian Bay Region**

In Barrie and Midland, new 3,000-kva substations were placed in service, and in Arthur the substation capacity was increased from 600 kva to 2,000 kva. A number of customer-owned substations were also built or increased in size in Alliston, Barrie, Beaverton, and Midland. Extensive rehabilitation was carried out to distribution systems in Creemore and Thornton. In Priceville the entire distribution system was changed over to 8-kv operation to accord with changes in distribution voltage levels in the area.

During the year, general reductions in resale rates were introduced in Burk's Falls, Magnetawan, Midland, Penetanguishene, Port McNicoll, Port Perry, Ripley, Russell, Sundridge, and Windermere. Rates for flat-rate water-heaters were similarly reduced in Bracebridge, Collingwood, Creemore, Holstein, Thornbury, Thornton, Uxbridge, Victoria Harbour, and Woodville. The promotion of electric heating, carried out as part of the general promotion work throughout the Province, met with encouraging results in the Georgian Bay Region. Electric heating equipment was installed in a total of 41 houses and 15 commercial buildings. Ten houses at present under construction in the region will also make use of electric heating.

## **East Central Region**

In the East Central Region the steady growth of municipal loads in 1959 resulted in the placing in service of new transformer capacity in Lindsay, Madoc, Napanee, and Peterborough. The distribution systems of Bobcaygeon and Frankford were extensively rehabilitated. Street-lighting systems in Bath, Marmora, Pickering, and Wellington were improved with the addition of fluorescent lighting units. More than 1,900 rural customers were transferred to municipal service when 3,600 acres of adjacent townships were annexed by Belleville.

The promotional activity of municipal utilities in the region resulted in electric heating equipment being installed in 12 houses and 3 commercial dwellings in 1959. Special rates for house-heating service were provided by 35 municipal utilities, while 11 utilities carried out general retail rate adjustments. Sales of electricity were further encouraged by the adoption of new rate schedules for flat-rate water-heaters by 24 municipal electrical utilities and the institution of a water-heater rental plan in 14 municipalities.

Commencing on July 1, 1959 the town of Campbellford was supplied with power under a cost contract with the Commission.

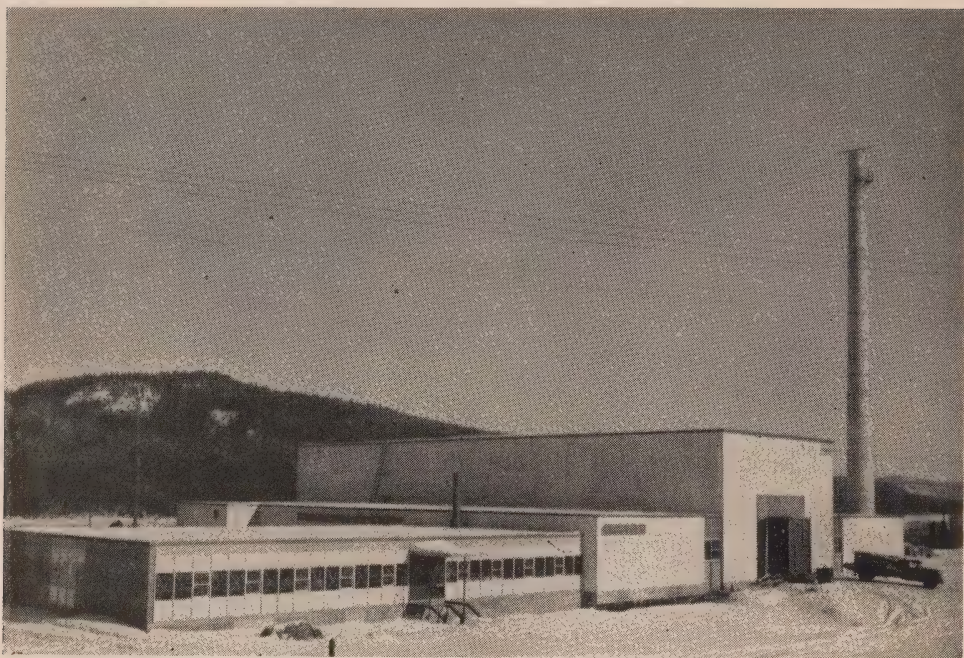
## **Eastern Region**

The activities of municipal electrical utilities in the Eastern Region during 1959 resulted in a substantial number of improvements and extensions to distribution systems throughout the region. In Ottawa, where the number of customers served in 1959 increased during the year by nearly 5 per cent to 84,416, three new substations were placed in service and the capacity of a fourth was increased. The additional transformer capacity provided amounted to 26,000 kva. Extensions were made also to the city's underground network. Approximately 7,000 feet of duct were placed underground, together with some 18 miles of 12-kv and 5-kv cable and transformer capacity totalling 14,350 kva. Extensions to the 4-kv underground network in Brockville were continued in 1959. Preparatory work there was also under way for the construction of a fifth municipal substation which will supply power at 8 kv and will permit the integration of adjoining rural areas with a minimum of change. Additional transformer capacity was supplied in Smith's Falls during the year when a new 3,000-kva substation was placed in service to meet increased demands for power. In Alfred and Vankleek Hill the municipal distribution systems were changed over



Freezing rains in late December resulted in heavy ice formations on transmission and distribution lines in southern Ontario. Commission linemen worked round the clock under hazardous conditions to restore service as soon as possible.





**NUCLEAR POWER DEMONSTRATION** — On the Ottawa River close to the Commission's Des Joachim's Generating Station, a nuclear power station is under construction. The first such station in Canada, it will have a capacity of 20,000 kilowatts.

to 8-kv operation, thus eliminating the necessity of providing additional step-down transformation facilities.

Improvements to municipal distribution systems in 1959 included the extension and modernization of street lighting, particularly on main thoroughfares and in commercial sections. During the year, fluorescent lighting units were installed in Alfred, Carleton Place, Casselman, Eganville, Hawkesbury, Iroquois, Lanark, Prescott, and Vankleek Hill. In Ottawa alone, 599 new lighting units were installed.

Throughout 1959, municipalities in the Eastern Region continued to urge customers to take advantage of low-cost power and the wide variety of electrical equipment generally available. Water-heater rental plans, already widespread in the region, were put into effect in Alexandria, Chesterville, Kemptonville, Lancaster, L'Orignal, Newboro, and Vankleek Hill during the year. In Brockville, 300 units were installed under a rental plan. Sales were further promoted when rates to customers in Casselman, Chalk River, Lanark, Merrickville, Morrisburg, Newboro, Perth, Renfrew, Vankleek Hill, and Westport were reduced.

The village of Avonmore purchased the local distribution system from the Commission, and on October 1, the municipal utility commenced purchasing power at cost.

### **Northeastern Region**

Distribution facilities in a number of municipalities in the Northeastern Region are owned and operated by the Commission. Improvements to street-lighting systems were carried out in Blind River, Englehart, Kirkland Lake,

Mattawa, and Powassan. In Blind River, and in King Kirkland Townsite, the Commission undertook improvements to distribution networks which resulted in greater security of service. Similarly, improvements were carried out by municipal utilities in Coniston, Thessalon, and West Ferris Township. In North Bay, Sturgeon Falls, and West Ferris Township, additional transformer capacity was provided to meet increased demands for power. In North Bay the first Gold Medallion home in the region was constructed during the year.

Arrangements were made in 1959 for the supply of power at cost to 10 of the 17 municipalities which at the beginning of the year were supplied with power at fixed rates. New contracts were negotiated with Cache Bay, Capreol, Cochrane, Kapuskasing, Larder Lake Township, Latchford, McGarry, North Bay, Sturgeon Falls, and Thessalon. Transmission facilities to serve Espanola at cost will be completed next year.

### **Northwestern Region**

A number of projects designed to improve service to customers were undertaken by municipal electrical utilities in the Northwestern Region in 1959. Construction was started for a new office building in Fort William and for warehousing and servicing quarters in Dryden. In Schreiber Township the distribution network was changed over to operation at 4,160 volts grounded. Previously it had been operated at 2,400 volts ungrounded. The capacity of the Commission's distributing station at Nipigon which supplies power to customers in Nipigon Township and Port Arthur Rural Operating Area was doubled during the year to 4,000 kva.

Reductions were made during 1959 in retail rates to customers in Red Rock and in Nipigon Township.

## **PUBLIC RELATIONS AND SERVICES TO CUSTOMERS**

With the support of the Ontario Municipal Electric Association, the Commission and the Ontario School Trustees' and Ratepayers' Association jointly sponsored public speaking contests in elementary and secondary schools of the Province. Estimates indicate that some 75,000 students participated in the contest.

### **Plantpower Program in Industry**

The Commission's staff have worked closely with the Canadian Electrical Manufacturers Association and the Electrical Bureau of Canada in what is known as a "Plantpower Program". The program provides for group discussion with industrial customers regarding every aspect of the supply of electric power with a view to improving service and the performance of electrical equipment.

### **Inspection**

Electrical installations are governed by regulations made by the Commission under The Power Commission Act. During the year there were numerous



enquiries regarding interpretation of rules and regulations, and, in particular, there was a marked increase in the number of enquiries concerning the electrification of summer residences and other rural installations. In order to deal appropriately with such enquiries, and to further the cause of electrical safety, the Commission published a manual entitled *Information Guide for the Electrification of Summer Cottages*.

Plans for high-voltage installations in commercial and industrial establishments are regularly reviewed by the inspection staff at Head Office before approval of actual installations is given by field inspectors.

Electrical inspection reports indicate that electrical accidents during the year claimed the lives of fifteen persons. Investigations into the causes of numerous fires established that at least seventeen were due to electrical causes such as defective wiring. If other fires were of electrical origin, proof could not be established on the evidence available.

The *Rules and Regulations* under The Power Commission Act require that in general electrical equipment sold to the public be submitted for approval by the Canadian Standards Association Testing Laboratories. The Association's approval reports are reviewed in detail to ensure that all equipment conforms with Commission requirements respecting grounding, connection of supply, suitability for use in specific locations, and other installation problems not included in the Canadian Electrical Code Part II specifications, upon which Canadian Standards Association approval is based. The Commission's adoption of the approval report constitutes approval of the equipment for use in the Province. Approximately 3,000 reports were received and adopted under this procedure in 1959.

The Commission, as one of nine Provincial inspection authorities, participated in activities sponsored by the Canadian Standards Association to study current codes and practices with a view to establishing minimum requirements for the construction and installation of electrical equipment.

### **Lighting**

Academy of Lighting Arts classes have been given in various centres. Lighting arrangements have been provided for three Gold Medallion houses and over 500 recommendations were made for lighting systems in public buildings.

## SECTION IV

### FREQUENCY STANDARDIZATION

**I**N 1949 when the Commission began the formidable task of standardizing electrical equipment in Ontario for operation at 60 cycles, approximately 757,000 customers in four regions in southwestern Ontario and other customers in fairly widespread parts of the northeastern section of the Province were being supplied with power at a frequency of 25 cycles per second. Some customers in the Hamilton-Niagara area were being served at  $66\frac{2}{3}$  cycles. The standardization program originally contemplated was limited to the Niagara Division, which included the four regions extending roughly west from the vicinity of Toronto to Windsor in the southwestern part of the Province. The equipment of all customers in this area, except heavy industries around Niagara Falls and the steel mills at Hamilton, was to be standardized at 60-cycle frequency and the whole operation was expected to extend over a period of 15 years. Instead, ten years and two months later, the work of standardization was completed, including the equipment of customers in the Northeastern Division. More than 7 million items of electrical equipment had been changed over for operation at 60-cycle frequency or replaced by comparable 60-cycle items. The total cost of the work completed and chargeable to the Commission was \$352.3 million, of which \$149.4 million has been charged to reserves and to the cost of power and \$202.9 million remains to be charged to the cost of power in future years.

#### Early Power Developments

The complexity of the undertaking was comparable in many ways to that of a large-scale military operation. The problem had its origin in the early development of power resources in Ontario. Two private power companies,



the Canadian Niagara Power Company, and the Ontario Power Company of Niagara Falls, first developed electric power alternating at 25 cycles from generating stations on the Niagara River shortly after the turn of the century.

PROGRESS OF FREQUENCY STANDARDIZATION  
BY CLASSES OF SERVICE

Class of service	Services standardized		Customer moves		Frequency-sensitive items standardized†	
	During 1959	Total to Dec. 31, 1959	During 1959	Total to Dec. 31, 1959	During 1959	Total to Dec. 31, 1959
<b>Domestic:</b> Southern Ontario System.....	20,037	759,530	.....	.....	148,194	4,035,960
Northeastern Division.....	.....	17,722	.....	.....	.....	78,847
Total domestic.....	20,037	777,252	1,047*	139,127*	148,194	4,114,807
<b>Commercial:</b> Southern Ontario System....	1,752	89,325	.....	.....	27,236	1,046,987
Northeastern Division.....	.....	2,365	.....	.....	.....	24,600
Total commercial.....	1,752	91,690	46*	2,944*	27,236	1,071,587
<b>Power:</b> Southern Ontario System.....	259	15,102	.....	.....	5,070	818,725
Northeastern Division.....	.....	191	.....	.....	.....	2,094
Total power.....	259	15,293	8*	506*	5,070	820,819
Total Southern Ontario System.....	22,048	863,957	.....	.....	180,500	5,901,672
Total Northeastern Division.....	.....	20,278	.....	.....	.....	105,541
Grand Total.....	22,048	884,235	1,101*	142,577*	180,500	6,007,213

\*These figures combine customer moves chargeable to the program in the Southern Ontario System with those chargeable to the program in the Northeastern Division.

†In addition to the frequency-sensitive items actually altered for operation at 60 cycles, a total of 1,007,780 small 25-cycle appliances were exchanged at Commission depots for similar 60-cycle equipment. In 1959 there were 40,687 exchanges of this kind.

Both companies planned to export the greater part of their output to the nearby 25-cycle power market in the United States. A third organization, the Electrical Development Company of Ontario, Ltd., commenced operation in the same area in 1906 with the intention of transmitting a large part of its output to Toronto, some 90 miles away. This was considered long-distance transmission at the time, and for this purpose a frequency of 25 cycles was preferred. Furthermore, electric current alternating at 25 cycles per second had definite advantages for the operation of large motors, rotary converters, and for other similar applications. These advantages, long since nullified as a result of advances in electrical engineering, naturally prompted the early developers of electric power to choose 25-cycle current as the most appropriate for their immediate purposes. The power developments undertaken on the Niagara River were therefore built for 25-cycle operation. In 1910, when The Hydro-Electric Power Commission of Ontario first supplied municipal customers under the terms of The Power Commission Act, its source of power was the 25-cycle facilities of the Ontario Power Company at Niagara Falls. During the ensuing 12 years the Commission acquired the Ontario Power Company and the Electrical Development Company by purchase and constructed its own Queenston-Chippawa Development on the Niagara River. By 1922 the 25-cycle frequency had become firmly established as the operating frequency in southwestern Ontario. In the northeastern section

of the Province also, the Commission acquired generating facilities which had been developed at 25 cycles by private organizations. There, too, with the passage of time and the gradual expansion of electrical facilities, the use of 25-cycle power had become widespread. An inventory taken in 1947 indicated that 784,300 customers would require standardization of their equipment in the program for southern Ontario. An estimate made in 1956, at the time the decision was made to extend standardization to the Northeastern Division, indicated that approximately 18,800 customers in that Division were using electrical equipment operated at 25 cycles.

### The Need to Standardize

During the fifty years or more intervening between the early Niagara developments and the inauguration of frequency standardization in Ontario, the trend over the North American Continent as a whole had been towards use of a 60-cycle frequency. Electrical service over a large part of the Province was also provided at 60 cycles. From time to time during this period, critical situations developed which prompted the Commission to consider standardizing frequency, but each time the decision for one reason or another was postponed.



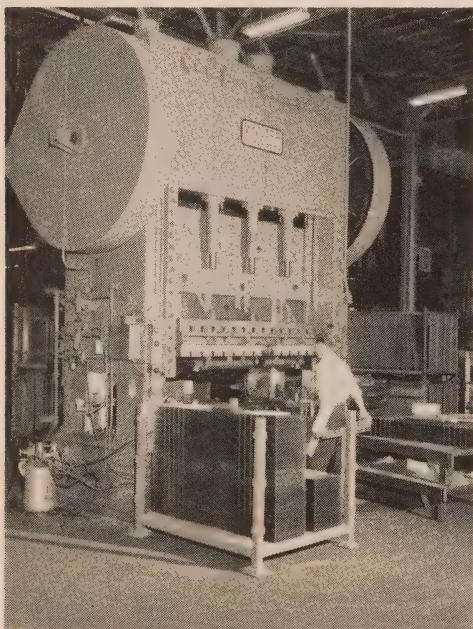
### FREQUENCY STANDARDIZATION

- Upper left: More than one million small electrical appliances were exchanged at clock and fan depots during the standardization program. The depots were conveniently located, and open daily to customers.
- Lower left: In the workshops at the A. W. Manby Service Centre, thousands of 25-cycle motors were rewound for operation at 60 cycles.
- Upper right: Sixty-cycle motors are here being tagged and assembled by technicians. They replaced 25-cycle motors of customers whose equipment was standardized for operation at 60 cycles.
- Lower right: Mobile frequency-changers were located at strategic points to maintain service to customers during standardization operations.



The advantages of standardization, however, became increasingly apparent with the passage of the years. The progressive integration of isolated systems, perhaps eventually into a province-wide power grid, would require a standardized frequency for maximum flexibility of operation. Similarly, operation at 60 cycles would permit freedom of interchange with adjoining utilities already operating at 60 cycles, thus making possible more efficient and flexible use of generating facilities and at the same time providing access to a substantial market for the Commission's surplus energy. The purchaser of electrical equipment in general could benefit in a system operating solely at a 60-cycle frequency since 60-cycle items would be available to him at lower cost than comparable 25-cycle items. Under conditions as they were, certain newly developed equipment designed for 60-cycle operation was actually not manufactured for sale at 25 cycles. Furthermore, anyone moving from a 60-cycle area to a 25-cycle area or vice versa was subjected to much inconvenience and considerable expense in changing over frequency-sensitive equipment. These factors were frequently sufficient to deter potential power service customers from establishing operations in the 25-cycle island of southern Ontario. These customers were also influenced by the fact that induction motors, used almost exclusively for motive power in industry, are much more limited in their range of speeds at 25 cycles than at 60 cycles.

These considerations alone might well have been sufficient to prompt the decision to standardize the frequency in southwestern Ontario. The decision was taken in 1948, following detailed studies and reports by the Commission's engineering staff, supported by supplementary analyses of the problem made



#### FREQUENCY STANDARDIZATION

Left: Typical of some of the major items of industrial equipment which required standardizing is this large steel press.

Right: A technician alters a washing-machine for operation at 60 cycles.

by the Stone and Webster Engineering Corporation, Clarkson, Gordon & Company, and Mr. Harold Hobson, former chairman of the Central Electricity Board of Great Britain. These studies and reports set out in clear terms the advantages to be derived from standardizing the frequency at 60 cycles per second.

In addition, there was early and unmistakable evidence in growing loads that post-war demands would soon exceed the Commission's power resources and that a large capital expansion program would have to be undertaken. In preparation for this, the Commission had already formulated plans for three large power developments on the Ottawa River. An important issue in the planning had been whether the new resources should be developed for 25-cycle or 60-cycle operation. In 1948, about 78 per cent of the total primary power requirements of the Commission's customers in Ontario was supplied at a frequency of 25 cycles per second, and these requirements were expected to increase substantially in the next few years. This was a powerful argument for continuing to use both frequencies in the Province, in which event, part or all of the new Ottawa River resources would have to be developed at 25-cycle frequency. This possibility was considered, but it was eventually rejected on grounds that seemed to far outweigh the advantages that it offered. It was evident, for example, that the cost of power developed at a frequency of 25 cycles would exceed that of power developed at 60 cycles. Further expenditure would be necessary if these resources were subsequently to be changed over from 25 cycles to 60 cycles, supposing that the decision to standardize were merely postponed. Considerable saving, therefore, could be achieved if the Commission developed all its new resources at 60 cycles. The significance of the decision to do so may be gauged from the fact that the capacity of the Commission's resources in the Southern Ontario System and the Northeastern Division of the Northern Ontario Properties increased by 3,563,400 kilowatts, or 178 per cent, between 1948 and 1959.

The advantages to be obtained by the Commission in using a 60-cycle frequency would accrue in similar fashion to all of the Commission's customers in areas changed over from 25-cycle to 60-cycle supply. The important advantages of 60-cycle power to large industrial users have already been mentioned. The municipal electrical utilities would benefit from the use of lower-cost 60-cycle electrical equipment, from the sale of released equipment, and from the value created in extending the life of standardized equipment. The municipal retail domestic, commercial, and power service customers, like the Commission's retail customers in rural areas and local systems, would benefit from the economies achieved in power production and distribution, and from the convenience of purchasing in a market adequately and economically supplied with standard 60-cycle equipment.

In addition to the distinct advantages to be obtained from standardizing the frequency, the time was also propitious for undertaking the work. A large power expansion program was about to be started and the financial climate was favourable. In addition, a substantial reserve fund had been built up during the war years as a result of industrial expansion under favourable economic conditions created by a number of inflationary factors. This contributed to make 1948 a particularly good year in which to initiate plans. In that year,



therefore, with the approval of the Ontario Municipal Electric Association, the first steps were taken to institute a program of frequency standardization. The Legislature enacted the necessary legislation and the Commission proceeded to establish the required organization and to prepare the basic plans. The program as then conceived was expected to continue until 1964.

#### Policies and Procedures

Under the authority of The Power Commission Act the Commission outlined the fundamental principles and procedures that were to be followed. In this it sought the guidance of engineering specialists, advisory committees of the Ontario Municipal Electric Association and the Association of Municipal Electrical Utilities of Ontario, and benefited by the advice of representative consumer groups and others. Following the establishment of a Frequency Standardization Division the work of assembling material, organizing channels of supply, and collecting data began. The Canadian Comstock Company

Limited, which was in a position to supply administrative and technical staff with experience in operations of a similar kind, was retained to carry out the main bulk of the actual work of standardization of customer-owned equipment in all 25-cycle regions of the Southern Ontario System except the Niagara Region. There the work was to be carried out by a number of contractors working in close liaison with the Commission's regional staff. Where customers chose to do the work themselves or to



**FREQUENCY STANDARDIZATION** — A customer is shown entering the Commission's mobile information centre during standardization operations. Inside, an efficient staff was ready to answer enquiries on all aspects of standardization.

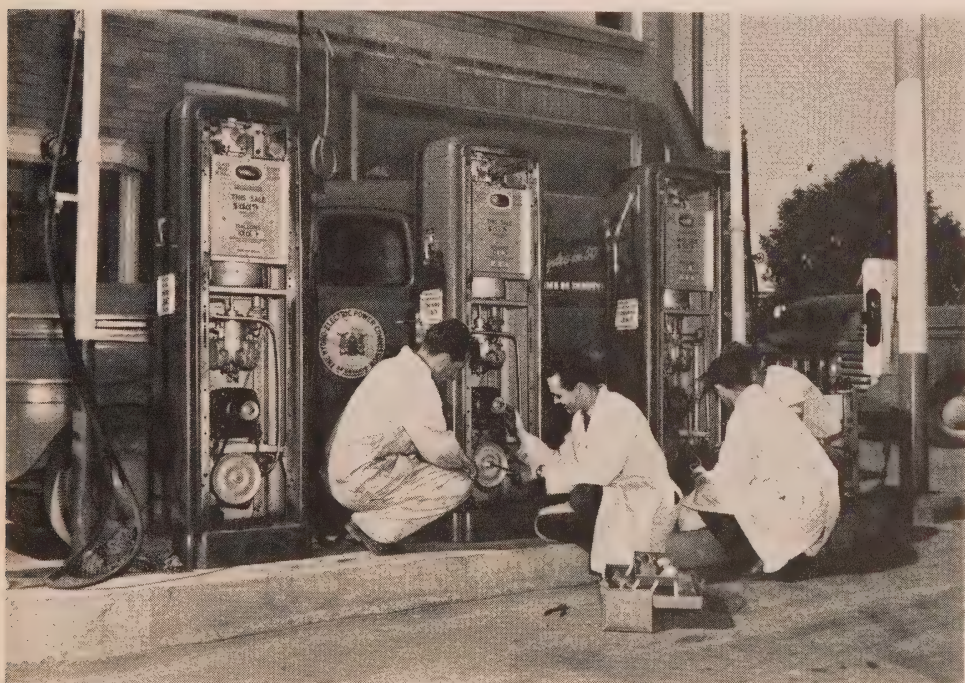
engage a contractor to work under their own supervision, the Commission was prepared to enter into agreements for the appropriate allocation of cost.

The entire standardization operation had three distinct phases, which required the most careful integration—the progressive changeover from 25-cycle supply to 60-cycle supply for the municipal electrical utility, the delivery of 60-cycle power in turn to the customer, and the coincident standardization of his 25-cycle electrical equipment.

Little change was required in the hydraulic turbines and associated equipment at 25-cycle generating stations standardized for operation at 60 cycles; the generators, however, and much of their auxiliary equipment required complete rebuilding. The main step-up and step-down transformation also was reconnected in some instances at very small expense, but a major reorganization of the 230-kv transmission circuits was required for the delivery of power from the Commission's generating facilities in eastern Ontario and the facilities of its Quebec suppliers, where standardization was also carried out. Synchronous condensers were rebuilt and additional capacity was provided, particularly in

the Toronto-Hamilton area. The construction of new facilities, however, was held to a minimum by the use of static capacitors or voltage regulators wherever this was feasible.

Resistance-type lighting installations required no change, and many of the very small fractional horsepower electric motors were universal or could be conveniently adjusted for 60-cycle operation. The Commission provided new 60-cycle electric clocks, fans, and similar small electric-motor appliances in exchange for 25-cycle models. Electrically controlled or operated heating equipment involved changing over motors and time-control equipment. The motors of the larger motor-driven equipment were replaced. Substantial economies were achieved in the standardization of 25-cycle refrigerators, one of the most expensive adjustments required for domestic service customers. By replacing the motor compressor only, instead of the entire refrigeration unit including the condenser and evaporator, it was possible to reduce the cost per unit by 45 per cent. About 2,000 of these refrigerators were standardized each month. Washing-machines were fitted with new or rewound 60-cycle motors. Where the mechanism of the washer was belt-driven the change was relatively simple; however, for gear-driven machines the cost of standardization was appreciably higher. Many of the 25-cycle motors recovered in these operations were rewound in the Commission's workshop for 60-cycle operation and subsequently used in other areas undergoing standardization. A meter shop established at the A. W. Manby Service Centre provided standardization, repair, adjustment, and inspection services in changing over meters both in the Commission's operation and on behalf of the municipal utilities.



**FREQUENCY STANDARDIZATION** — Equipment of all types was changed over to 60-cycle operation. These technicians are shown replacing 25-cycle motors at a neighbourhood gas station with motors operating at the higher frequency.



The ingenuity of the changeover crews was challenged on occasion by odd items operated by frequency-sensitive equipment—an electric motor operating a small door to let a cat in and out, a 67-year-old jukebox that manipulated steel records more than 2 feet in diameter, an electrically operated model cow, an electric bridge table that dealt and shuffled cards, a pump motor 80 feet below ground-level in a farmer's well. All were successfully altered to operate at 60 cycles. Standardization procedures for industrial power customers were generally more complicated than those for domestic service. A number of industrial motors were satisfactorily rewound for 60-cycle service; there were, however, problems where specific speeds were a prime consideration in the operation of the equipment. Where an industrial customer used a wide variety of motor drives, and this is usual in most modern factories, the cost of standardizing was relatively high.

A preliminary test standardization program was begun in East York Township in May 1949. The experience gained in this operation indicated where the prime organizational and administrative difficulties lay, and permitted refinements in procedures before the main work commenced. It was obvious that the areas chosen for standardization in the initial stages should be those conveniently accessible to sources of 60-cycle power. Consideration was also given to the fact that certain utilities were entering a period of what proved to be explosive load growth. Substantial economies would obviously be achieved if this new load could be picked up at the higher frequency. As the program developed, every effort was made through the provision of advance supply at 60 cycles to meet this problem of load growth.

In the following October the main program was under way in southwestern Ontario. In addition to the Commission's main contractor, more than 300 independent electrical dealers and contractors were engaged in carrying out the scheduled work of standardization. Customers who moved from 25-cycle areas to areas already served at a 60-cycle frequency required unscheduled standardization which was carried out by more than 1,000 contractors or dealers in electrical equipment. At the height of activity under this arrangement, as many as 2,000 customers in southwestern Ontario required work done in one month. The decision to extend standardization to the Northeastern Division of the Northern Ontario Properties was taken in 1956, and preparatory work was undertaken during 1957. Actual standardization operations began there in February 1958. When this part of the program ended 7 months later, more than 100,000 items of electrical equipment had been standardized for customers in this area.

#### **Financing the Standardization Program**

Different methods of financing the frequency standardization program were studied and analysed. At the beginning it was estimated that among the 784,300 customers in the Southern Ontario System program each domestic service customer would have, on the average, 2.7 frequency-sensitive appliances to be standardized or replaced. The entire standardization job was to be completed in 1964. In the years that followed, the work schedules were accelerated so that the entire program, including the Northeastern Division, was completed by July 1959. Meanwhile the program itself was continuously expanding, first because of the increase in population of the Province, and second because of

the increase in the number and variety of frequency-sensitive appliances in use. Towards the end of the program the average was not 2.7 but almost 6 per domestic customer, while the total number of customers for all services had increased to well over a million. Labour and materials became more costly as each year passed. The effect of this was offset to some extent by economies in standardization techniques, by the provision of advance frequency standardization, and through arrangements made by the Commission with manufacturers for the production of dual-frequency equipment. Nevertheless, the cumulative expenditure at the end of the program was unavoidably and substantially higher than had been originally estimated. The method of underwriting the cost of this huge undertaking was based on recommendations originally made by the Commission's financial consultants, Clarkson, Gordon & Company. Under the method proposed, the municipal utilities were to underwrite the costs of standardizing their own local distribution facilities while the Commission was to bear the cost of standardizing its facilities and those of its Quebec suppliers. The Commission also assumed the entire cost of standardizing the 25-cycle equipment of all domestic-type service customers and in large part the cost applicable to other classes of ultimate customers. It was considered equitable, however, that certain power service customers should help defray the cost of frequency standardization by an amount related to the benefit derived from the extension of the life of their standardized equipment, or the installation of new 60-cycle equipment. A tariff was established, and the amount of payment was based on the numbers and capacities of motors rewound or replaced. Since only customers whose levy under this arrangement would exceed \$250 were required to meet these charges, about 75 per cent of all industrial power service customers were unaffected. The industrial tariff recovery in total amounted only to approximately 5 per cent of the entire expenditure.

### **Allocating the Cost**

As the program approached completion in 1959, the Ontario Municipal Electric Association at its annual meeting in March requested the Commission to engage Clarkson, Gordon & Co. to review the method being followed for apportioning the cost and "to determine whether the actual financing and apportionment of costs of conversion as carried out to date have placed an unjust burden on any municipality, and if this is found to be so, to recommend changes which will correct the situation." Clarkson, Gordon & Co. were appointed for this purpose on April 15, 1959 and the Company's report was submitted on February 1, 1960; its recommendations were communicated to the municipal commissions for their consideration, and at the annual meeting of the Ontario Municipal Electric Association on March 1, the recommendations were formally received and approved in principle.

The report reiterated that there was unquestioned merit in apportioning costs in accordance with benefits received. From the beginning, it had seemed inequitable to impose the total costs of standardization on the 25-cycle island known as the Niagara Division since other Divisions would obviously benefit to some extent from expected savings in the cost of generation and step-up transformation. Furthermore, it was inconceivable that costs could follow the individual customers on whose behalf expenditures for the standardization of



services had been incurred; these costs must therefore be borne not only by customers in the Niagara Division at the time of standardization but by future customers in the Division who would subsequently enjoy the benefits of 60-cycle power. On this basis, some part of the cost must be allocated to new loads as they might develop in the standardized areas. To do otherwise would be to favour customers in those municipalities which, in order to effect the greatest overall saving in cost, were selected for changeover early in the program; it would correspondingly penalize customers in other municipalities where 25-cycle loads would grow with every month that commencement of standardization was delayed. That is to say, the municipalities standardized earliest would assume a minimum cost for standardization and would enjoy in ever-increasing measure the benefits of 60-cycle power; those standardized late would find that costs varied directly and benefits inversely with the length of time that standardization had been delayed.

The original plan of financing the program in southern Ontario provided that the cost of changing over municipal distribution facilities would be borne by the municipal commissions directly, the cost applicable to rural and local-system distribution facilities would be charged to current operating expense for these accounts, that the part of the cost which represented the extension of the life of fixed assets would be capitalized, and the remainder would be financed as the residual system cost of frequency standardization. This residual cost was to have been recovered from (1) funds taken from system reserves and set aside for the purpose, (2) interest earned on these funds, (3) special assessments which would have the effect of maintaining the cost of power at 1946 levels, (4) revenue from the sale of 60-cycle secondary export energy, and (5) direct charges to power service customers, leaving a balance to be funded and repaid after the completion of the 15-year program. This balance was expected to amount to approximately \$44,200,000. As it turned out, the cost of the Commission's program in the Southern Ontario System was more than double the amount at first contemplated, largely because of the expansion of the program to accommodate over 240,000 additional customers and to standardize, on behalf of domestic customers, more than twice the number of frequency-sensitive items originally estimated. The larger cost also reflects the increase in cost of labour and materials. This has required some adjustment in the method of obtaining the funds necessary for liquidating this increased cost. As early as the end of 1948 it was apparent that charges under item (3) in the foregoing list of financing methods would not produce the revenue expected, and frequency standardization charges somewhat larger than originally planned were levied in each of the years 1948 to 1950 inclusive. In each of the following years until the completion of the program, assessments for frequency standardization were made to municipal utilities in the Niagara Division but not to utilities in the other Divisions. The continuously expanding program tended to use up the funds set aside for standardization more quickly than had been expected, and had the effect of reducing the amount of interest return on these funds below the expected levels. Direct charges to power service customers produced slightly more, and sales of 60-cycle secondary export energy substantially more, than the revenue originally estimated to be derived from these sources.

**Table of Expenditures by The Hydro-Electric Power Commission of Ontario  
on Frequency Standardization**

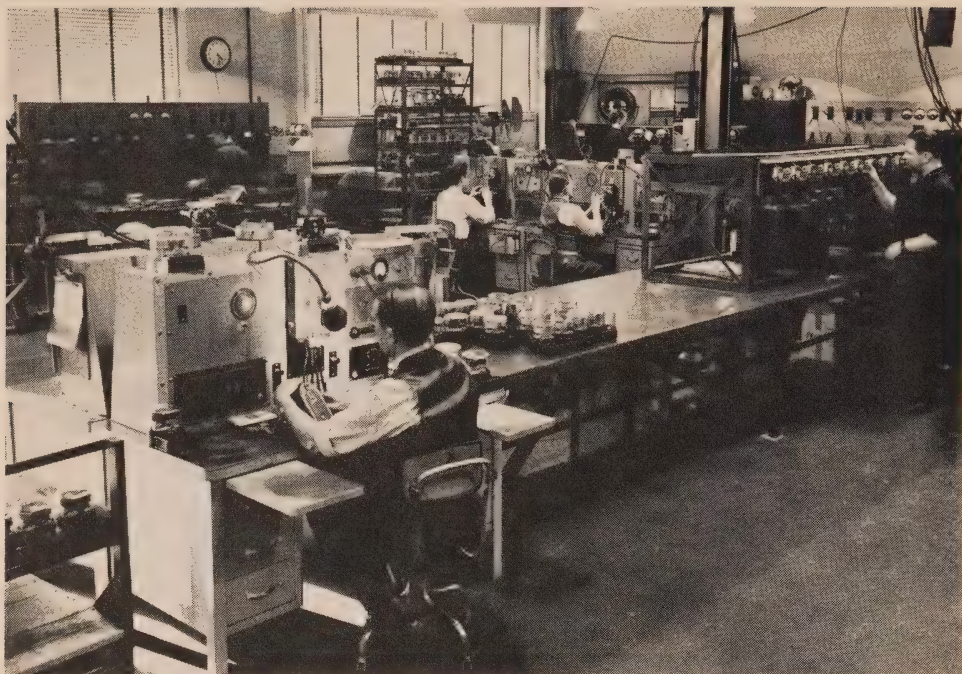
	Prior to 1959	During 1959	Total at Dec. 31, 1959	Amounts amortized or to be amortized
<b>Southern Ontario System</b>	\$	\$	\$	\$
Standardization of customers' equipment and system facilities (charged to frequency standardization account).....	331,581,640	14,507,371	346,089,011	146,735,284*
Standardization of rural and local distribution facilities (charged to rural and local operations, maintenance, and administrative expense).....	1,705,598	205,539	1,500,059	1,500,059
	333,287,238	14,301,832	347,589,070	148,235,343
Expenditures on inventory of equipment, supplies, and other assets...	1,889,479	1,889,479	.....	.....
Amount to be written off in future years.....	.....	.....	.....	199,353,727*
Total expenditures.....	335,176,717	12,412,353	347,589,070	347,589,070
<b>Northern Ontario Properties</b>				
Standardization of customers' equipment.....	4,661,977	62,133	4,724,110	.....
Amortized to December 31, 1959....	.....	.....	.....	1,140,451
Amount to be written off in future years.....	.....	.....	.....	3,583,659
Total expenditures.....	4,661,977	62,133	4,724,110	4,724,110

\*The amount already amortized has been reduced and the amount to be written off in future years has been increased by \$1,039,802 as an adjustment in the amounts charged in prior years.

The net result was that, of the total of \$352,313,180 chargeable to the Commission for frequency standardization, \$148,235,343 had been charged to the cost of power and reserves in the Southern Ontario System to December 31, 1959 and the balance remaining to be amortized in this system in future years amounted to \$199,353,727. The cost of standardization work in the Northeastern Division of the Northern Ontario Properties is included in the figure of total expenditure but was not included within the terms of reference of the Clarkson, Gordon & Company report. Frequency standardization in the Northeastern Division was not contemplated at the time their original estimates were made. Of this cost amounting to \$4,724,110, the amount of \$1,140,451 had been charged to the cost of power in the Northeastern Division up to December 31, 1959, leaving a balance of \$3,583,659 to be amortized in future years.

In a concluding summary the report suggests that with the foregoing exceptions the plan of financing has been carried through substantially as originally contemplated, and that no unjust burden has been placed on the municipal utilities of the Niagara Division. Among the recommendations made was the proposal that a total annual assessment should be continued against Niagara Division customers (exclusive of residual 25-cycle load), the amount not to exceed the total charged in 1959. This would result in a diminishing rate per kilowatt as loads grow, and the extension of the amortization period to the year originally contemplated for complete recovery of costs—about 1983. If, on the other hand, assessment at the rate of \$5.00 per kilowatt were to be continued





**FREQUENCY STANDARDIZATION**—Hundreds of meters arrived daily at the meter shop established at the A. W. Manby Service Centre in Toronto during standardization. Here, they were made ready for operation at 60 cycles, calibrated, and adjusted.

as in 1959, the period of amortization would be shortened by about eleven years, to end in 1972. The municipal commissions in the Niagara Division have been asked to express their preference for the longer or shorter amortization period.

### **Conclusion**

A number of industrial customers in the Province are still served at 25 cycles because the costs of standardization were not warranted by the benefits accruing either to the customers or to the Commission. In southwestern Ontario most of these customers are located in the Niagara area where sufficient generating capacity has been left at 25 cycles for their supply. The installation of a frequency-changer at Sir Adam Beck-Niagara Generating Station No. 1 provides additional security for these 25-cycle customers, and flexibility of interchange between the 25-cycle and 60-cycle networks. In the northeastern section of the Province a number of mining company loads are supplied at 25 cycles principally from Abitibi Canyon Generating Station, and, whenever necessary, through frequency-changers.

The work of frequency standardization was officially completed on July 6, 1959. On that day in Metropolitan Toronto when the final 25-cycle domestic service was standardized, an interesting chapter of Ontario Hydro's development was closed. At one time during the program more than 3,600 men and 1,300 vehicles were engaged in the work. On the average over the entire 10-year period, six appliances were standardized every minute of the regular working day. This record achievement was made possible through the outstanding co-operation of all who were party to the work—customers, contractors, and power suppliers alike.

## SECTION V

### PLANNING, ENGINEERING, AND CONSTRUCTION

**D**URING the decade ended December 31, 1959 the Commission expanded its generating facilities by more than four million kilowatts, 86 per cent of the increase being hydro-electric. Of the hydro-electric total, 86 per cent was in southern Ontario, concentrated on three large rivers—the Niagara, St. Lawrence, and Ottawa Rivers. The remaining 14 per cent of the hydro-electric power developed was variously located on six rivers in the northern part of the Province.

Although there are now no further sites for major hydro-electric development in southern Ontario, there remain a possible two million kilowatts in northern Ontario in a number of sites generally remote from areas of concentrated load. Under any economic scheme of development they are inadequate, if taken by themselves, to match the present rate of load growth on the systems. They become, however, quite feasible for economic development if constructed in conjunction with base-load thermal-electric stations. Present plans provide for such an integrated program, and for the transmission of power from the more remote hydro-electric stations to larger load centres over lines operated at a voltage of 460 kilovolts or higher.



Summary of the Power Development Program—1950-1965  
as at December 31, 1959

<i>System and Development</i>	<i>No. of units</i>	<i>In-service schedule</i>	<i>Capacity*</i>
SOUTHERN ONTARIO SYSTEM			
Des Joachims—Ottawa River.....	8	1950—1951	372,000
Chenau—Ottawa River.....	8	1950—1951	117,000
Richard L. Hearn—Toronto.....	4	1951—1953	400,000†
	1	1959	200,000†
	3	1960	600,000†
J. Clark Keith—Windsor.....	4	1951—1953	264,000†
Otto Holden—Ottawa River.....	8	1952—1953	210,000
Sir Adam Beck No. 2—Niagara River.....	16	1954—1958	1,200,000†
Pumping-Generating Station.....	6	1957—1958	170,000†
Robert H. Saunders—St. Lawrence River.....	16	1958—1959	940,000†
Nuclear Power Demonstration—near Des Joachims GS	1	1961	20,000†
Lakeview—near Toronto.....	4	1961—1964	1,200,000†
Douglas Point (nuclear)—near Kincardine.....	1	1965	200,000†
NORTHERN ONTARIO PROPERTIES			
NORTHEASTERN DIVISION			
George W. Rayner—Mississagi River.....	2	1950	47,000
Abitibi Canyon (extension)—Abitibi River.....	1	1959	45,000
Red Rock Falls—Mississagi River.....	2	1960—1961	38,000
Otter Rapids—Abitibi River.....	4	1961—1963	172,000
NORTHWESTERN DIVISION			
Pine Portage—Nipigon River.....	4	1950—1954	119,200
Manitou Falls—English River.....	5	1956—1958	65,700
Caribou Falls—English River.....	3	1958	79,300
Whitedog Falls—Winnipeg River.....	3	1958	61,700
Cameron Falls (extension)—Nipigon River.....	1	1958	19,100
Alexander (extension)—Nipigon River.....	1	1958	11,300
Silver Falls—Kaministiquia River.....	1	1959	45,500
Thunder Bay—Fort William.....	1	1961	100,000†

\*Capacities quoted are dependable at time of system peak except those marked †, which are installed capacities.

New thermal-electric developments in the early years of the decade provided only 14 per cent of the resources developed by the Commission in the 10-year period. During the decade ahead the relative proportions of hydro- and thermal-electric development will be reversed. The program outlined for the period 1960-1965 in the table on this page indicates that 90 per cent of the 2.3 million kilowatts at present scheduled for installation will be in thermal-electric stations. Of this amount, 220,000 kilowatts will be installed in stations making use of nuclear fuel.

Construction was carried out during 1959 at nine power developments, five hydro-electric and four thermal-electric. During the year, work was completed at Robert H. Saunders-St. Lawrence Generating Station, at Abitibi Canyon Generating Station on the Abitibi River, and at Silver Falls Generating Station on the Kaministiquia River. All three of these developments are now fully in service. Construction of the main works was undertaken at Otter Rapids on

## Expenditures on Capital Construction by Fiscal Years 1950-1959

	Genera- tion	Transfor- mation	Trans- mission	Rural	Other	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
*1950.....	86,637	28,025	30,346	19,521	6,951	171,480
1951.....	94,267	25,143	17,886	22,725	4,597	164,618
1952.....	96,682	22,954	15,628	23,033	4,534	162,831
1953.....	117,311	21,711	15,444	24,402	4,767	183,635
1954.....	76,649	15,360	16,091	20,133	4,585	132,818
1955.....	68,483	12,624	10,823	18,961	3,681	114,572
1956.....	128,245	13,464	11,424	17,244	2,626	173,003
1957.....	151,738	17,302	19,295	17,347	3,010	208,692
1958.....	126,204	20,688	20,806	19,556	3,402	190,656
1959.....	98,251	20,788	12,159	19,542	3,364	154,104
Total.....	1,044,467	198,059	169,902	202,464	41,517	1,656,409

\* 14-month fiscal period

the Abitibi River and at Red Rock Falls on the Mississagi River. The thermal-electric projects where construction is proceeding are: Richard L. Hearn, Lakeview, and Thunder Bay Generating Stations and the Nuclear Power Demonstration plant near Des Joachims Generating Station on the Ottawa River. A site between Kincardine and Port Elgin was selected for the CANDU nuclear-electric project, which becomes the fifth non-hydraulic power development in the present program. It will now be known as Douglas Point Nuclear Power Station.

The Commission is now engaged in the economic evaluation of a number of its smaller hydro-electric stations in service. Some of these require extensive rehabilitation after operation for fifty years or more, having been originally constructed as parts of small private or municipal utility systems and subsequently purchased by the Commission for incorporation into its larger system. The present evaluation will establish whether in the interests of efficient and economic operation the development of power at any particular site should be continued. Where continued development is justified, the evaluation will also indicate whether the present installation should be rehabilitated or the site should be completely redeveloped for greater output.

The adjustments to the transformation and transmission facilities carried out during 1959 are detailed following the reports on progress on power developments for each of the systems. Further adjustments are planned for the Commission's interconnections with the Niagara Mohawk Power Corporation at Sir Adam Beck-Niagara Generating Stations No. 1 and 2. The 60-cycle interconnection at 230 kv, at present supplying the 115-kv network at the Corporation's Packard Transformer Station, will be tied into its newly developed 230-kv system. Other improvements will benefit both systems by permitting the transfer of power in either direction for the supply of customers in the Niagara Falls area, where a number of industrial furnace loads are still supplied at 25-cycle frequency.

Office and Service Buildings

Construction was completed for a maintenance building at R. H. Martindale Transformer Station and for four area office buildings, five area service buildings, and three combined area office and service buildings. With the curtailment of the capital construction budget for 1960, work was deferred for the new regional office building for the Toronto Region and for combined office and service buildings in three rural operating areas.

The Commission's present research laboratories, which were built on Strachan Avenue in Toronto in 1913, will be razed to permit construction of the Frederick G. Gardiner Expressway. A new research centre is to be built at the A. W. Manby Service Centre where much more adequate space can be made available for the widely varied experimental and testing activities. The building will be electrically heated and air-conditioned.

In the future the Commission will make increasing use of electric energy in heating its buildings, and will provide the necessary power from its own facilities wherever this is conveniently possible. Four area offices and one regional office have been designed with electric resistance heating.

Survey Work

Approximately 600 line miles of aerial photographic survey were completed on scales varying from 400 to 2,000 feet to the inch. Topographic models covering approximately 187,000 acres were compiled on a stereo plotter. These models,

Total Mileage of Transmission Lines and Circuits

Voltage and Structure	Line route or structure miles		Circuit miles	
	At Dec. 31, 1958	At Dec. 31, 1959	At Dec. 31, 1958	At Dec. 31, 1959
SOUTHERN ONTARIO SYSTEM				
230,000-volt.....steel tower.....	2,827.15	2,939.27	3,551.28	3,780.81
115,000-volt.....steel tower.....	1,558.59	1,511.57	2,407.86	2,364.80
115,000-volt.....wood pole.....	939.85	952.29	944.46	956.90
115,000-volt.....underground cable.....	19.35	20.60	43.15	45.65
60,000-volt.....steel tower.....	11.17	11.17	12.30	12.30
60,000-volt.....wood pole.....	3.31	3.31	3.31	3.31
44,000-volt and less wood and steel...	4,725.01	4,778.85	5,228.66	5,277.36
Total Southern Ontario System....	10,084.43	10,217.06	12,191.02	12,441.13
NORTHERN ONTARIO PROPERTIES				
230,000-volt.....steel tower.....	55.28	55.28	55.28	55.28
230,000-volt.....wood pole.....	251.80	251.80	251.80	251.80
115,000-volt.....steel tower.....	885.50	894.24	1,522.78	1,531.52
115,000-volt.....wood pole.....	1,460.19	1,476.46	1,460.19	1,476.46
69,000-volt.....wood pole.....	203.72	203.72	203.72	203.72
44,000-volt and less wood and steel...	1,748.32	1,685.34	1,814.16	1,753.40
Total Northern Ontario Properties..	4,604.81	4,566.84	5,307.93	5,272.18
Total—All systems.....	14,689.24	14,783.90	17,498.95	17,713.31



which cover 19 locations in the Province, will be used for engineering studies of new projects and for the study of such operating problems as silt concentration occurring in the headpond at DeCew Falls Generating Station. Extensive survey was carried out both on and off shore at the Douglas Point Nuclear Power Station site. River investigation surveys were undertaken on the Mattagami, Mississagi, Abitibi, and White Rivers and, in particular, at the potential hydraulic sites at Thunderhouse Rapids, Little Long Rapids, Aubrey Falls, and Nine Mile Rapids.

The completion of 22 registered plans of subdivision for the St. Lawrence Power Project area brings to 44 the current total established. Approximately 18,500 of the 19,180 acres held by the Commission have now been dealt with. The revised plans have simplified the descriptions of land transfers and now provide a sound basis for future land management. A number of important boundary marks were precisely established and recorded both in the county registry offices and in the records of the Commission.

## SOUTHERN ONTARIO SYSTEM

### Progress on Power Developments

The Robert H. Saunders-St. Lawrence Generating Station, which was completed during 1959, was the subject of a special descriptive article in last year's Annual Report. A brief report on the work done there in 1959 follows, together with similar reports on the progress of work at three other generating station projects under construction in the Southern Ontario System.

#### ROBERT H. SAUNDERS-ST. LAWRENCE GENERATING STATION

<i>Location</i>	—The International Rapids Section of the St. Lawrence River at Cornwall.
<i>Installed Capacity</i>	—940,000 kilowatts in 16 units, 60 cycles (Ontario Hydro's share).
<i>Rated Head</i>	—81 feet.
<i>In Service</i>	—7 units in 1958; 9 units in 1959 on January 19 and 21, March 19 and 25, May 29, June 10, August 13 and 14, and December 18.
<i>Estimated Cost</i>	—\$300,000,000, including generation, step-up transformation, and associated high-voltage switching at St. Lawrence Transformer Station.

With the initial operation of the sixteenth unit on December 18 the entire station was in service. Excavation was carried out beyond the limits of the navigation channel for the purpose of improving stream-flow, and further excavation will be undertaken in the river up stream from the powerhouse in order to establish the necessary depths and velocities to meet navigation requirements and to provide for the formation of ice cover in the winter months. This work is scheduled for completion in 1960. Dredging in the tailrace area immediately down stream from the powerhouse will begin in the spring of 1960 and will

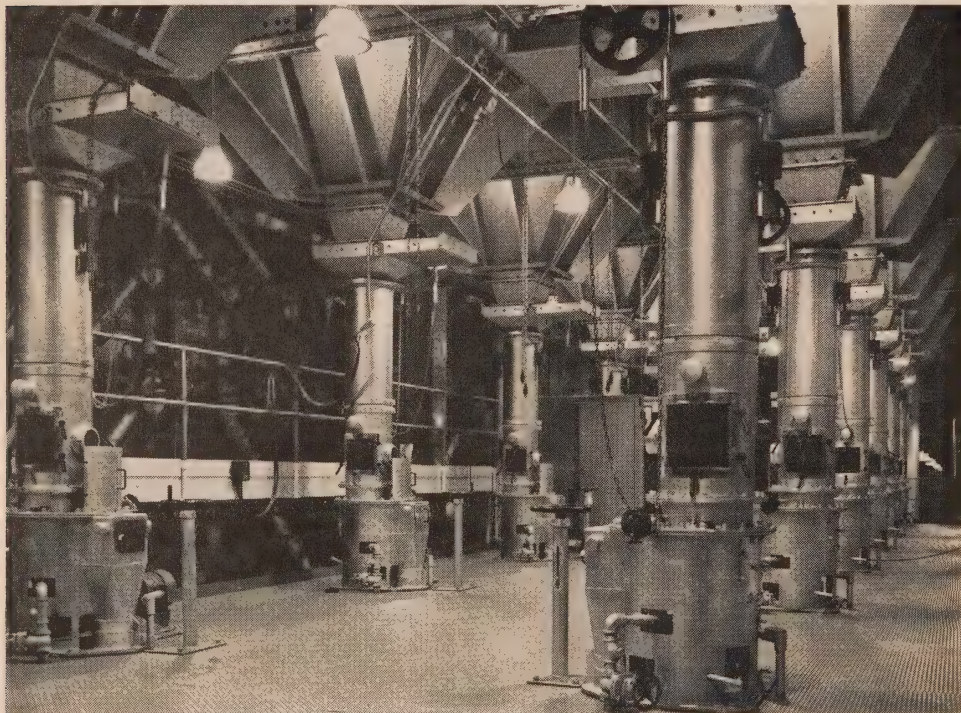


continue throughout two navigation seasons till completion, which is scheduled for October 1961. Only minor items of rehabilitation work remain in the area affected, and these will be finished early in 1960.

#### RICHARD L. HEARN GENERATING STATION—TORONTO

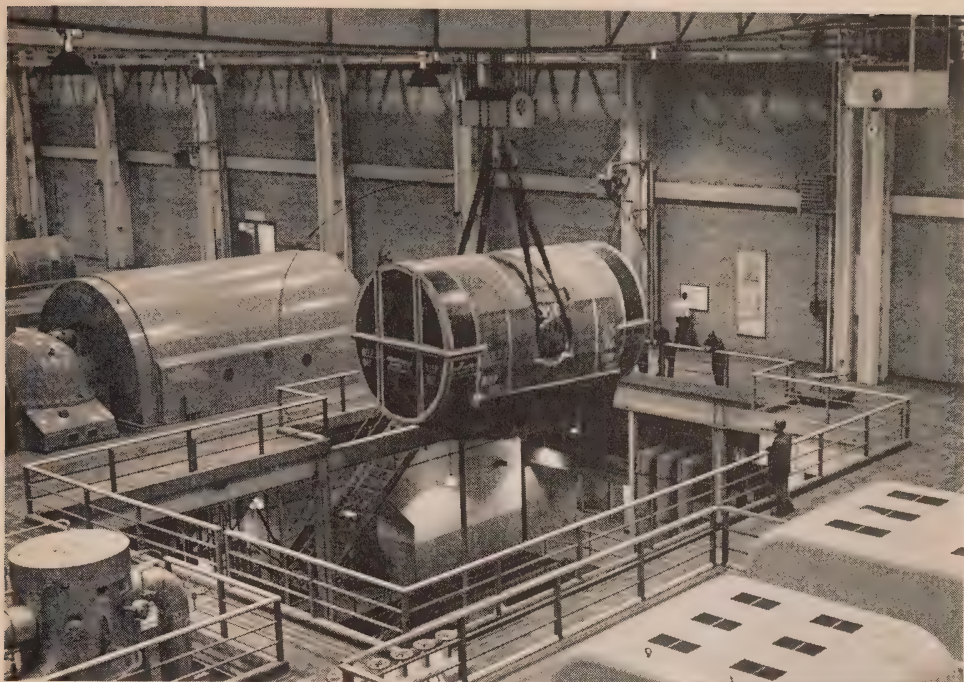
<i>Location</i>	—Eastern area of the Toronto waterfront.
<i>Installed Capacity</i>	—1,200,000 kilowatts, 60 cycles (400,000 kilowatts in 4 units, and 800,000 kilowatts in 4 units).
<i>In Service</i>	—Unit No. 1, 1951; Units No. 2 and 3, 1952; Unit No. 4, 1953; Unit No. 5 on May 27, 1959.
<i>In-Service Schedule</i>	—3 units in 1960.
<i>Estimated Cost</i> (4 additional units only)	—\$107,640,000, including generation, step-up transformation, and high-voltage switching at the site.

Each of the four additional turbo-generators being installed at this station will have a rating of 200,000 kilowatts, or twice that of any of the first four units. The first was placed in operation in May but during the test period was removed from service following damage to the boiler equipment. The generator unit, operated as a synchronous condenser during November and December, supplied reactive power as required for the Toronto area. The second 200,000-kilowatt unit is scheduled for service early in January 1960.

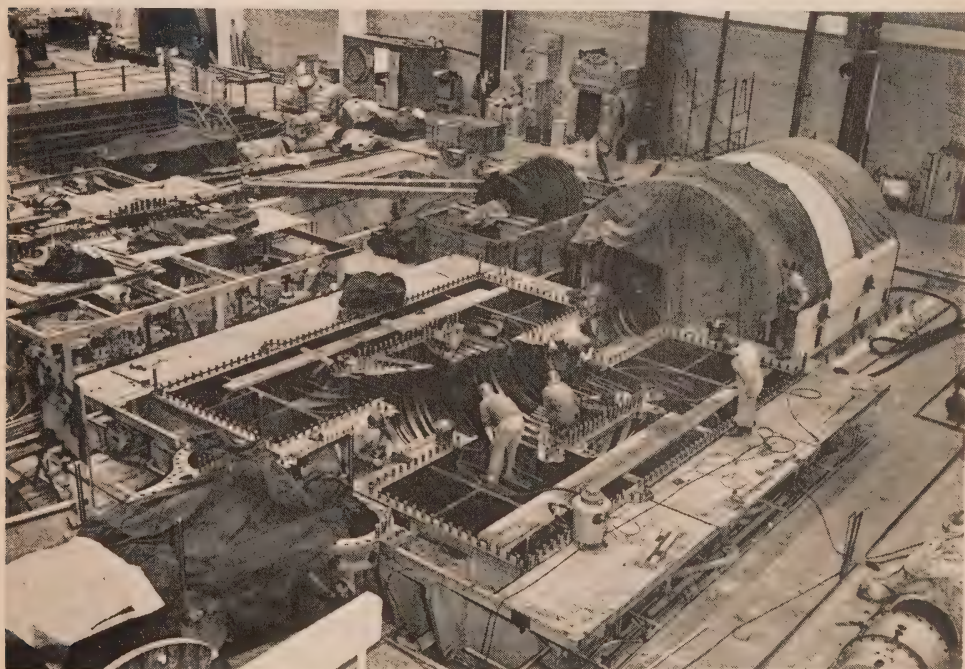


RICHARD L. HEARN GENERATING STATION — Feeder chutes and pipes supply coal to the pulverizers for number 5 turbo-generator unit. In powder form it will then be blown into the boiler where it is burned. On full load, a single 200,000-kilowatt unit will require 75 tons of coal per hour.





**RICHARD L. HEARN GENERATING STATION** — An electric crane moves a stator casing into position. Weight of the casing is more than 100 tons.



**RICHARD L. HEARN GENERATING STATION** — Skilled workmen assemble the bottom half of the duplex low-pressure cylinder for number 7 unit. The low-pressure, 1,800-rpm generator is located in the background under cover. Number 7 unit will be the third of the four additional 200,000-kilowatt generating units to be installed at this station. It is scheduled for service late in 1960.

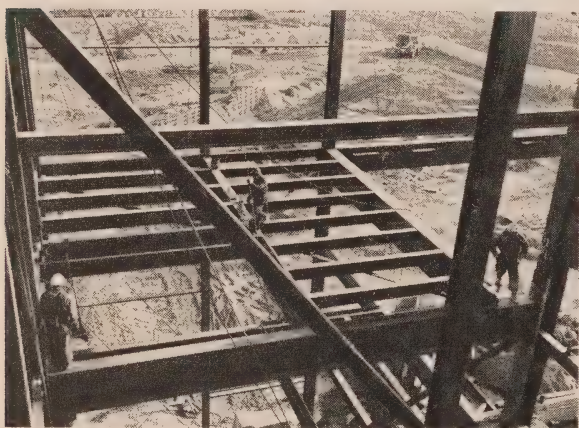
## LAKEVIEW GENERATING STATION—NEAR TORONTO

<i>Location</i>	—On Lake Ontario just west of Toronto.
<i>Installed Capacity</i>	—1,200,000 kilowatts in 4 units, 60 cycles.
<i>In-Service Schedule</i>	—Unit No. 1 in 1961, Unit No. 2 in 1962, Unit No. 3 in 1963, and Unit No. 4 in 1964.
<i>Estimated Cost</i>	—\$174,000,000, including generation, step-up transformation, and high-voltage switching at the site.

Detailed engineering design and production of plans for the first two units continued throughout the year. In some areas of work there will be little margin between the issue of field drawings and the commencement of construction, but the work in general is satisfactorily on schedule. Studies of alternative designs were undertaken with respect to dock construction and the height of the chimneys. The decision was that the dock will have a reinforced-concrete deck on a base of steel sheet-piling cells filled with concrete. The chimneys will be built 490

feet high to provide adequate dispersal of combustion products. Contracts have been awarded for almost all the equipment for the first two units, including circulating-water pumps, feedwater and combustion-control equipment, high-duty valves and piping, and coal-handling equipment.

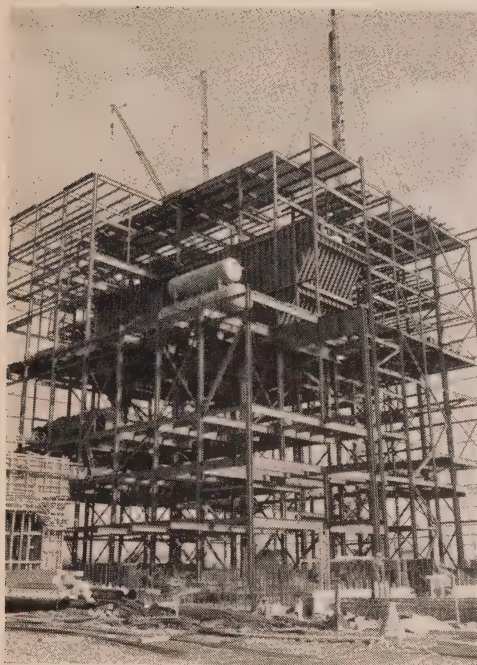
Following the decision in 1959 to extend the station by the installation of Units No. 3 and 4, specifications for the turbo-generators and boilers were issued. By the end of December the contract for the former had been let and tenders for the boilers were being evaluated.



LAKEVIEW GENERATING STATION—Early in October, work forces began the erection of the structural steel framework for the station. By the end of 1959, more than 1,300 tons had been erected and concrete foundations for the first turbine block were being poured. Here steel workers, with the casualness born of competence, direct the placing of steel beams high above ground-level.

A railway siding was constructed from the Canadian National Railways main line into the site. Construction roads were built on the site and the main access road was completed except for final surfacing. Earth and rock excavation was completed in the powerhouse area. By the end of December, structural steel to the extent of 1,300 tons had been erected in the boiler and auxiliary bay areas of Unit No. 1, and some concrete had been poured for the turbine block and general equipment foundations. Excavation for the discharge tunnel and channel was finished and 70 per cent of the tunnel was concreted. The intake channel was excavated as far as the pumphouse forebay. About 75 per cent of the 8-foot concrete cooling-water pipe had been laid between the pumphouse





LAKEVIEW GENERATING STATION

Left: The steel skeleton of the Commission's third major thermal-electric station in southern Ontario takes shape rapidly. At the lower left, part of the wooden formwork for the first concrete turbine block is being erected.

Right: A section of pipe is hoisted into the air by a crane and manoeuvred into position. It will form part of the water-service system supplying the new generating station and will be completed by mid-1961.

and the powerhouse. Rock fill and armour stone placing were completed for the breakwater and two stages of the causeway. Before severe winter weather set in during November, sufficient dredging had been done in the dock and intake channel area to permit dock construction to begin in the spring of 1960, unhampered by dredging operations. The remaining dredging should be completed early in 1960.

## NUCLEAR POWER PROJECTS

The Nuclear Power Demonstration near Des Joachims Generating Station on the Ottawa River is being built jointly by the Commission, Atomic Energy of Canada Limited, and Canadian General Electric Company Limited. The output of the single 20,000-kilowatt unit will be supplied to the Commission's power system.

Work commenced in November for the installation of process equipment in the powerhouse, which was complete except for internal finishing. The pumphouse structure was finished. Engineering for the conventional features which are the Commission's responsibility was for the most part complete. The station is scheduled for service in 1961.

Under an agreement, also with Atomic Energy of Canada Limited, the Commission is participating in the full-scale, uranium-fuelled, heavy-water



moderated development now known as the Douglas Point Nuclear Power Station. The Commission is providing the services of up to 15 engineers together with

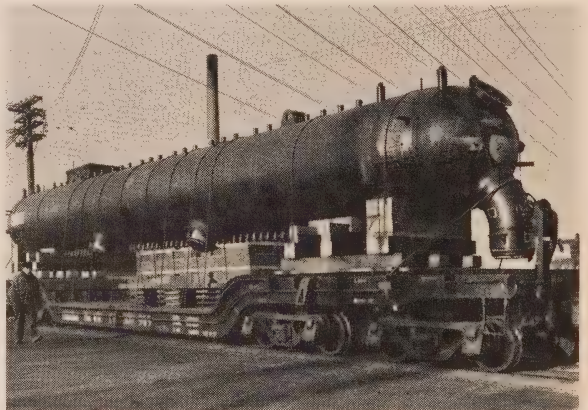


**LAKEVIEW GENERATING STATION** — Using chain hoists, workmen carefully ease a 12-ton concrete section of the 8-foot-diameter cooling-water duct into position. More than 700 million gallons of water daily will be used for cooling purposes at this station when the projected six units are in operation.

accommodation for their work for the duration of the project. Engineering, accounting, supply, research, and construction services are being made available to complement the Atomic Energy of Canada Limited organization, and part of the cost of professional services on design and construction is being assumed by the Commission. An operating and maintenance staff, trained at the Commission's expense, will be ready for the in-service date at Douglas Point late in 1964 or early in 1965.

As part of the same agreement the Commission undertook (a) to provide a project site, (b) to build a transmission line connecting the new station with the Southern Ontario System network, (c) to operate the station during the initial trial period, and (d) to purchase the station, when its operating characteristics have been proved suitable, at a price which will enable the energy output to be competitive in cost with that of a modern coal-fired station.

During 1959 the 2,300-acre site which gives its name to the project was selected and purchased. Located on Lake Huron between Kincardine and Port Elgin, Douglas Point most effectively satisfied the principal criteria established—(1) proximity to a satisfactory supply of cooling water, (2) the physical characteristics required for adequate foundation, (3) location within 30 miles of a 230-kv system line, and (4) a population density acceptable to safety authorities.



**RICHARD L. HEARN GENERATING STATION** — The 165-ton steam drum shown en route from the factory will be installed for one of the additional generating units. The drum, measuring 7 feet in diameter, has a steel shell 6 inches thick.

#### **Additional Equipment at Sir Adam Beck-Niagara Generating Stations**

A 400,000-kva voltage-regulating transformer being installed on the tie-line with the Niagara Mohawk Power Corporation at Sir Adam Beck-Niagara

Generating Station No. 2 is scheduled for service in April 1960. The 45,000-kva, 25/60-cycle frequency-changer, in service at Chats Falls Generating Station since 1935, was moved to Sir Adam Beck-Niagara Generating Station No. 1, where it is to return to service in the spring of 1960.

#### **Standardization of Generating Equipment at 60 Cycles**

The last stages were completed for the standardization of Quebec sources of supply. The final units changed over included one generator at the Gatineau Power Company's Chelsea Generating Station, the last of four units standardized at Maclaren-Quebec Power Company's Masson Generating Station, and two of the four standardized in the Ottawa Valley Power Company's half of Chats Falls Generating Station.

### **Transformer Stations**

In the Southern Ontario System an extensive program of work provided almost 1.5 million kva of additional transformer capacity in 1959. The net increase in capital investment required was approximately 11 per cent of the total spent on fixed assets. Six new transformer stations were placed in service while capacity was increased at 12 other major stations throughout the system. In particular, extensive work was carried out in the high-load areas of Metropolitan Toronto and Hamilton and in the southwestern and east central sections of the Province.

#### **Stations in the Western, West Central, and Niagara Regions**

Heavy demands for power in the southwestern section of the Southern Ontario System required extensive changes to the Commission's transformation facilities there, particularly in areas about London and Sarnia. A new station, Lambton Transformer Station, with a capacity of 430,000 kva was fully established at Sarnia by the end of the year. Municipal peak loads in the area had increased more than fivefold and industrial consumption had increased almost 350 per cent since 1948. Lambton Transformer Station assists in meeting these loads and has improved service security and voltage stability, conditions which are most important to the large oil refineries and chemical plants in the area. An additional transformer capacity amounting in total to 232,000 kva was installed in London, two 83,333-kva transformers at Highbury Transformer Station and two 33,333-kva transformers at Nelson Transformer Station, the latter transformers for service early in January 1960.

The frequency standardization of Burlington Transformer Station was completed, and as part of a program to increase the transformation capacity of this station, the last of the 230—115-kv, 25-cycle transformer banks was replaced by a 215,000-kva, 60-cycle autotransformer. This new transformer, together with two similar autotransformers previously installed, now provides sufficient capacity to meet estimated loads in the Hamilton area until 1965. A number of 230-kv and 115-kv circuit-breakers were installed also during the year to provide for the higher short-circuit duties and added switching requirements at 60 cycles.

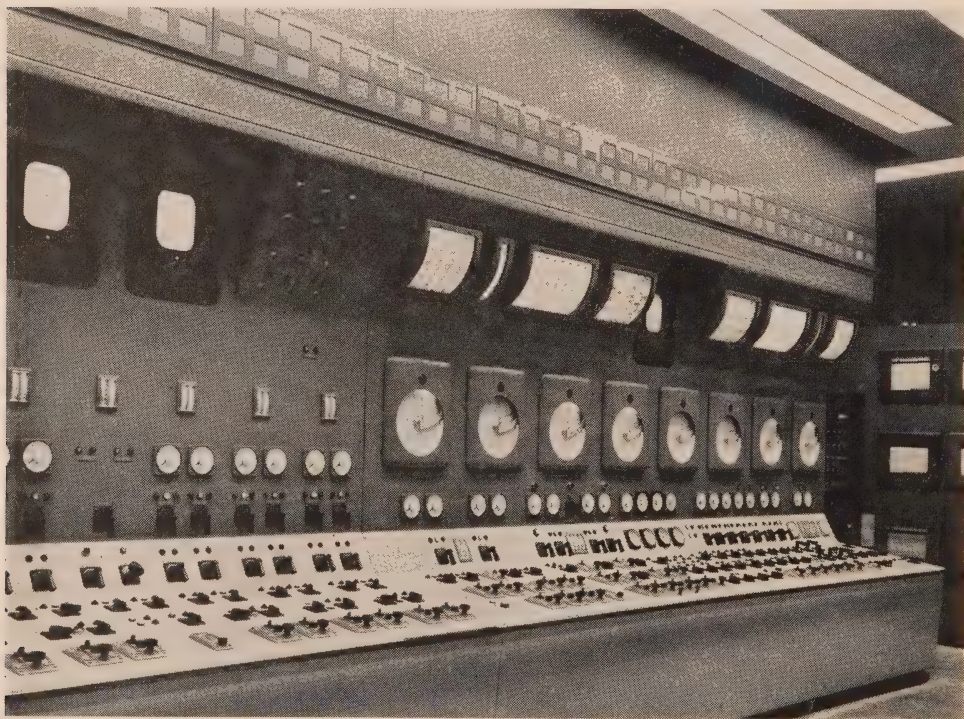
Customers in areas supplied from Strathroy and Galt Transformer Stations were assured of greater service security following increases in capacity at these



stations of 15,000 kva and 83,333 kva respectively. Two 15,000-kva transformers were installed also at Detweiler Transformer Station to double the 115—26-kv step-down capacity of that station. To meet loads in the Niagara area, a new 33,333-kva transformer station was built on a site immediately north of Niagara Falls. Known as Stanley Transformer Station, it will be placed in service early in 1960 to substantially improve service security to customers in the surrounding area. A second new transformer station, Niagara Parks, will be established also in 1960 in the Niagara Falls area to provide a 115—69-kv, 25-cycle inter-connection with the Niagara Mohawk Power Corporation across the Niagara River.

#### Stations in the Toronto Area

The most significant changes in transformer capacity were provided in the area of Metropolitan Toronto where approximately 1 million kva of capacity were placed in service in 1959. This capacity, however, was offset to a considerable extent by the removal of a number of 25-cycle and 60-cycle transformers. At Leaside Transformer Station, three 50,000-kva, 230—27.6/13.2-kv transformers, each with a forced-cooled capacity of 83,333 kva, were placed in service during the summer months to meet low-voltage loads in the city of Toronto and in the townships of North York and East York. All three transformers have two secondary windings with built-in underload tap-changing equipment which permits a municipal utility to have voltage control independent of that of other loads. Sound-reducing covers on the transformers ensured that the noise level



RICHARD L. HEARN GENERATING STATION — Closed-circuit television screens on the control panel for number 6 unit indicate combustion conditions in the boiler. At the top of the panel an annunciator shows trouble points that may develop. Controls for auxiliary equipment of each unit are located on the bench.

in adjacent residential areas was at a minimum. In conjunction with this work, facilities for the frequency standardization of the station were installed, and by the end of the year its standardization at 60 cycles was complete. The 215,000-kva, 230—115-kv autotransformer placed in service at Leaside Transformer Station early in January 1959 brought the total capacity of 60-cycle, 230—115-kv transformation there to 645,000 kva.

A third 215,000-kva autotransformer was installed at A. W. Manby Transformer Station as part of the frequency standardization and expansion program begun there three years ago. Eventually a fourth 215,000-kva autotransformer will replace the remaining 115,000-kva autotransformers. The synchronous condenser capacity was also increased during 1959 by the rebuilding of a second 40,000-kva, 25-cycle condenser to 48,000-kva, 60-cycle capacity. Five of the 230-kv oil circuit-breakers were removed for use elsewhere. The program of work at present under way at A. W. Manby Transformer Station will be further expanded in 1960-61 to provide for new load demands from customers in the western limits of Metropolitan Toronto and to provide connections for two 230-kv circuits from the Commission's new thermal-electric generating station at Lakeview. Six new 230-kv circuit-breakers with high interrupting capacity and two 83,333-kva, 230—27.6-kv transformers will be installed.

In the downtown area of Toronto, additional capacity was available with the installation of two more 33,333-kva transformers at Glengrove Transformer Station and with the placing in service of the new 115—44-kv Teraulay Transformer Station. Ultimately this latter station will have a firm capacity of 160,000 kva.

#### **Stations in the Georgian Bay Region**

The Commission is co-operating with Atomic Energy of Canada Limited in the development on the shore of Lake Huron of the 200,000-kilowatt Douglas Point Nuclear Power Station. The construction of this station in the Georgian Bay Region will require substantial changes to transformation facilities in the Owen Sound area. Present plans call for the installation of two 115,000-kva, 230—115-kv autotransformers at Hanover Transformer Station in 1961 as well as the construction of 230-kv transmission lines. In conjunction with this work a new 115—28.4-kv transformer station will be built at Elmira to provide adequate service to the area under normal conditions and also under emergency conditions with one circuit out of service.

#### **Stations in the East Central and Eastern Regions**

Early in 1959 the final stages in the establishment of St. Lawrence Transformer Station were completed. Four 230-kv single-circuit lines now connect the station with the Robert H. Saunders-St. Lawrence Generating Station.

The Commission also installed new transformation facilities to provide additional power to industrial centres located along the north shore of Lake Ontario in the east central section of the Province. A 230,000-kva transformer station was placed in service at Cataraqui late in 1959 to supply bulk power to the Kingston-Belleville area. At Port Hope a new 83,000-kva, 115—44-kv transformer station was placed in service in November to improve service security

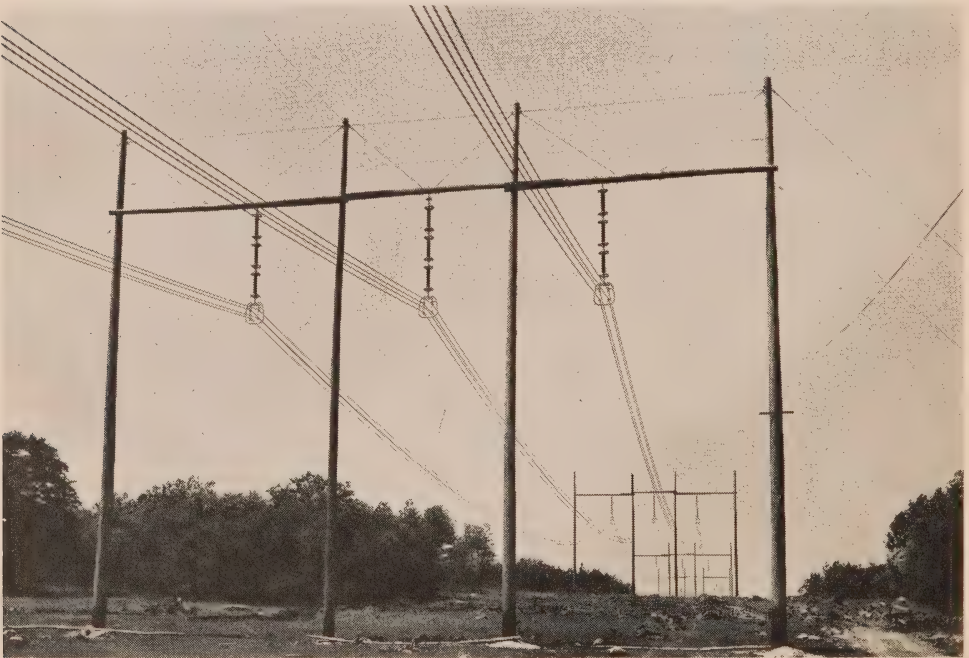


and to supply new loads in the Port Hope-Cobourg area. Westward at Oshawa an 83,000-kva transformer was installed at Thornton Transformer Station to increase the capacity of the station to 125,000 kva.

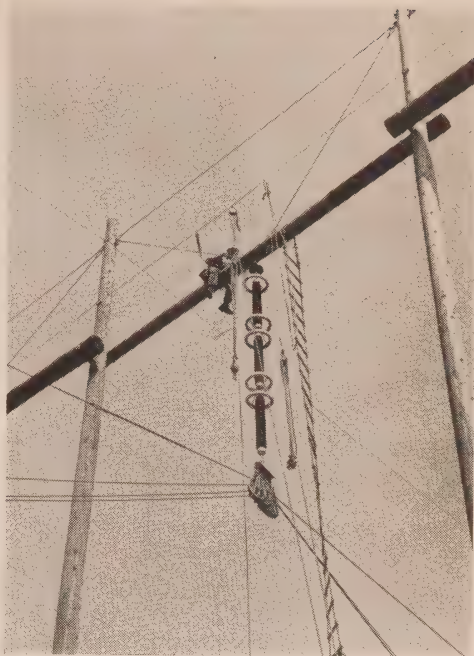
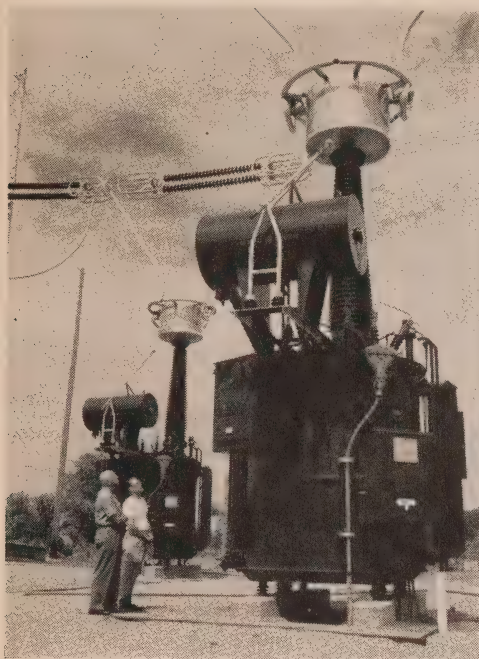
In the eastern section of the Province the construction of a new 83,000-kva transformer station at Morrisburg neared completion and early in 1960 it will be placed in service to provide service to customers in that area. At Ottawa a second 33,333-kva transformer was placed in service at Woodroffe Transformer Station, supplying power to the western section of the city. Ultimately four transformers will serve customers from this station. Albion Transformer Station, of equal capacity, was under construction in the northeastern section of Ottawa during the year, and in November the installation of the first transformer was completed. A second will be installed early in 1960. At Riverdale Transformer Station, providing service to customers in the south-central section of Ottawa, the installation of three 29,000-kva voltage-regulating transformers neared completion by the end of 1959.

### Transmission Lines

In the Southern Ontario System there was a net increase of 201 circuit miles of transmission facilities carrying power at voltages of 230 kv and 115 kv. This was a considerable decrease from the corresponding figure of 366 miles for 1958 when the establishment of a broad network of high-voltage transmission lines was in progress in eastern Ontario. In 1959, however, the Commission, while continuing its program of extension and improvement, entered a new phase in



**EXTRA-HIGH-VOLTAGE TRANSMISSION** — In 1959, the Commission built two  $\frac{1}{2}$ -mile, extra-high-voltage test transmission lines near Coldwater, Ontario. They are operated at voltages of from 460 kv to 600 kv, and tests are being made for radio interference and corona. Three 4-bundle conductor phases are visible in the above illustration with the corona shields at the suspension positions.



## EXTRA-HIGH-VOLTAGE TRANSMISSION

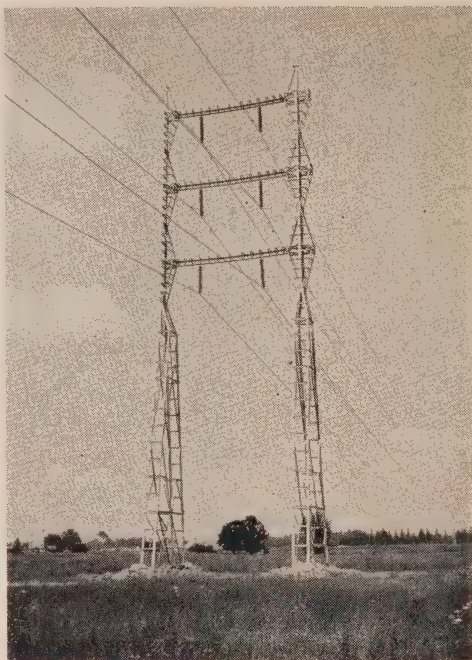
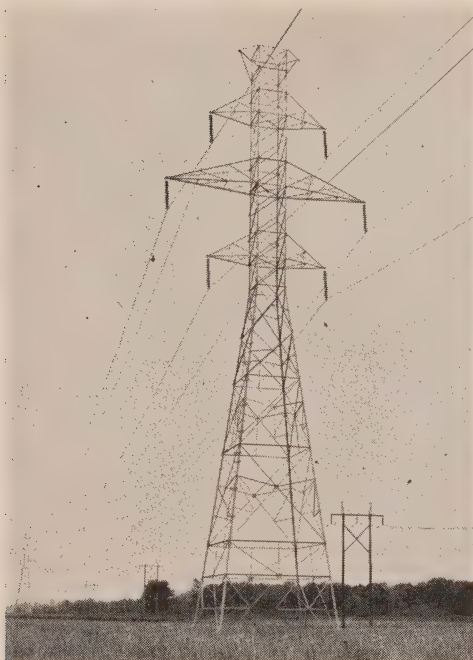
**Left:** Two of the three 350-kv test transformers installed on the extra-high-voltage test transmission line built near Coldwater. The housing on top of the bushings contains metering instruments and will provide for disconnecting. Each transformer weighs 30 tons.

**Right:** Straddling a spar arm high in the air, a Commission lineman gets into position as the extra-high-voltage test line is strung on specially braced wood-pole structures. The three-section Langstab insulator shown here was manufactured in Europe. These insulators were used because of their electrically quiet characteristics.

the development of transmission facilities—the planning of an extra-high-voltage transmission network. Two half-mile sections of extra-high-voltage transmission lines were built from a test station near the village of Coldwater in the Georgian Bay Region and by midsummer, preliminary tests were under way there at voltages up to 600 kv, phase to phase. The line has since operated continuously, three phase, at voltages between 460 and 600 kv, enabling studies of radio interference and corona losses to be made. These studies, which will be completed in 1960, are the first step in the development of an extra-high-voltage transmission system which may eventually extend from Abitibi Canyon Generating Station in northeastern Ontario to Metropolitan Toronto, a total distance of more than 450 miles.

Major extensions and improvements to the present transmission network in southern Ontario, particularly in the southwestern section of the Province, were continued throughout 1959. New 230-kv lines were under construction there during the year to improve the link between western and central high-load areas. In February a second 230-kv circuit was placed in service between E. V. Buchanan Transformer Station and J. Clark Keith Generating Station. The second circuit was provided by stringing new conductor in a vacant position on a section of line already built. It now provides for future load growth in the Windsor area, and has also improved the Commission's interconnection with





From E. V. Buchanan Transformer Station, 230-kv transmission lines are carried westward on two types of Commission-designed double-circuit steel towers. The X1S tower on the left, weighing almost 9 tons, is 140 feet in height, with a maximum cross-arm width of 48 feet. The Q3S bridge-type tower on the right, weighing over 14 tons, is 122 feet in height, with a maximum width of 34 feet. The bridge-type tower, extended only 34 feet by the inclusion of a third upright shaft, can accommodate two additional circuits and is therefore particularly suitable for use in areas where the width of right of way must be restricted.

The Detroit Edison Company in the United States. A similar double-circuit line was also built westward from E. V. Buchanan Transformer Station a distance of 63 miles to Lambton Transformer Station in Sarnia where substantial increases in loads in past years necessitated greater supply facilities. A further 65 miles of 230-kv double-circuit transmission line were under construction during the year to link E. V. Buchanan Transformer Station with Neale Junction near the Hamilton area. With the completion of this work in 1960, greater service security to power customers in the southwestern section of the Province will be assured.

The Commission was also engaged during 1959 in a variety of work in the extension of transmission facilities in the central sections of the Province. As part of the 25-cycle interconnection with the Niagara Mohawk Power Corporation, a 69-kv line will be rebuilt next year for operation at 115 kv. This line, together with 69-kv river-crossing circuits, will be reconnected to a new 115—69-kv transformer station to be built at Sir Adam Beck-Niagara Generating Station No. 2. Near Hamilton, the construction of a four-circuit, 115-kv transmission line from Windermere Junction to Hamilton-Beach Transformer Station was completed towards the end of the year, and an old double-circuit line along the right of way was removed at the same time. In Toronto, the Commission finished the installation of two 115-kv underground cable circuits over a total distance of 13,700 feet to supply power to Teraulay Transformer Station. The underground transmission network in the city will be further extended in 1960 to incorporate the output of the final two 200,000-kva steam turbo-generators at Richard L. Hearn Generating Station. A review of the service security of the

115-kv transmission system in Toronto made during the year indicated the need for additional relay protection for the south loop circuits and the reconstruction of some of the 115-kv circuit-breakers at present at Richard L. Hearn Generating Station. Present plans call for this work to be completed next year. In the spring of 1959 the 230-kv, double-circuit transmission line from St. Lawrence Transformer Station westward to Richview Transformer Station was rerouted through Cherrywood Switching Station, and approximately 1½ miles of 230-kv, double-circuit, steel-tower transmission line were erected to complete the connection. All switching arrangements at Cherrywood Switching Station were completed during 1959, and the station was fully established as a main switching point for 230-kv transmission circuits carrying power westward from eastern generating resources.

In the east-central section two 230-kv circuits from St. Lawrence Transformer Station were rerouted through Hinchinbrooke Switching Station, newly placed in service in October, about 25 miles north of Kingston. Eight 230-kv oil circuit-breakers installed there during the year now provide terminal facilities for two transmission lines to the Toronto area, three lines from St. Lawrence Transformer Station, and one line to Cataragui Transformer Station.

## **NORTHERN ONTARIO PROPERTIES**

### **Progress on Power Developments**

During 1959, construction for new generating stations was carried out at four hydro-electric sites and one thermal-electric project in northern Ontario. Brief progress reports are given for the stations where work is continuing. A somewhat more comprehensive description is given of Silver Falls Generating Station where a single 45,500-kilowatt unit was placed in service on September 1, 1959.



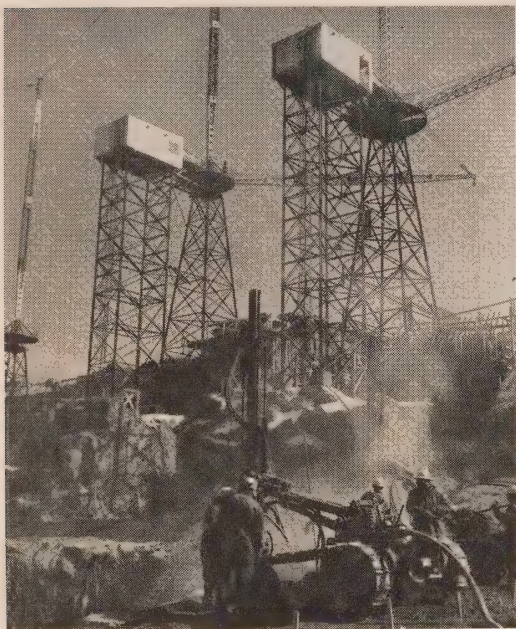
**OTTER RAPIDS GENERATING STATION** — An early snowfall presaged the winter cold to follow at this power site on the Abitibi River. Otter Rapids is only 85 miles from James Bay, and winter temperatures here were close to 40° below zero. Despite the intense cold, approximately 65,000 cubic yards of concrete had been placed at this project by the end of the year.



## OTTER RAPIDS GENERATING STATION—ABITIBI RIVER

<i>Location</i>	—60 miles northeast of Kapuskasing and 23 miles downstream from Abitibi Canyon Generating Station.
<i>Dependable Peak Capacity</i>	—172,000 kilowatts in four units, 60 cycles.
<i>Rated Head</i>	—107 feet.
<i>In-Service Schedule</i>	—Two units in 1961 and two units in 1963.
<i>Estimated Cost</i>	—\$39,100,000, including generation, step-up transformation, and high-voltage switching at the site.

The station is being constructed at the downstream end of the lower of two series of rapids on a 2-mile stretch of the river known as Otter Canyon. The high canyon walls will permit the development of a 107-foot head with relatively little headpond flooding. The main dam will span the river at the downstream end of an island which divides the river for some 1,500 feet, and the arrangement is such that construction of the powerhouse and headworks on the west bank will be unaffected by water diversion problems. Excavation for the powerhouse substructure was largely finished by the end of the year.



OTTER RAPIDS GENERATING STATION—Twin guy derricks rise 170 feet in the air over construction workers operating a track-mounted drill in the erection bay area of the generating station under construction.

As part of the first stage of construction, a concrete bulkhead structure adjoining the powerhouse is being built across the west channel of the river in the dry, the flow of the river being temporarily diverted into the east channel. Part of the concrete for

diversion ports in this structure has been placed. The second stage of construction will involve the diversion of flow through the diversion ports and the completion of the bulkhead structure to connect with the sluiceway structure on the east bank of the river. All piers and rollways for this sluiceway structure were finished. Earth-fill dams between the concrete structures and the shores of the river were nearly finished at the end of the year. The necessary minimum provision is being made at this time for the later addition of four more units.

The headpond area is partly cleared.

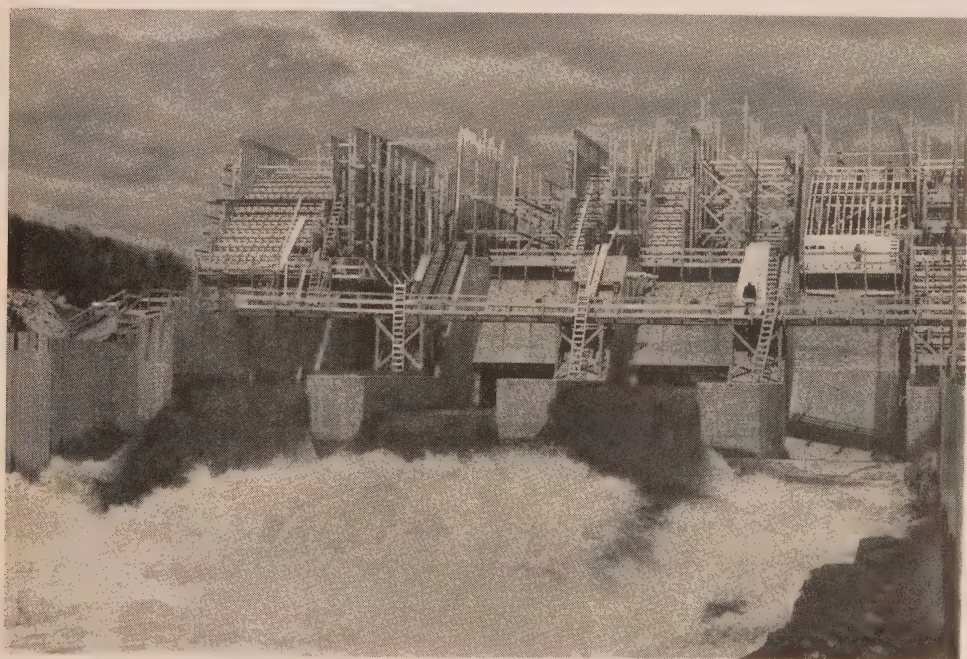
## RED ROCK FALLS GENERATING STATION—MISSISSAGI RIVER

<i>Location</i>	—Northeast of Thessalon and 15 miles down stream from George W. Rayner Generating Station.
<i>Dependable Peak Capacity</i>	—38,000 kilowatts in 2 units, 60 cycles.
<i>Rated Head</i>	—93 feet.
<i>In-Service Schedule</i>	—1960-61.
<i>Estimated Cost</i>	—\$19,100,000, including generation, step-up transformation, and high-voltage switching at the site.

The main dam includes a powerhouse headworks section adjoining the east bank of the river, and a sluiceway section at the west bank, separated from the powerhouse by a centre gravity section. The sluiceway section will have seven sluices, two of them motor-operated. The structure will be tied into the banks of the river by gravity sections at each end, and a log-chute will be incorporated in the east gravity section.

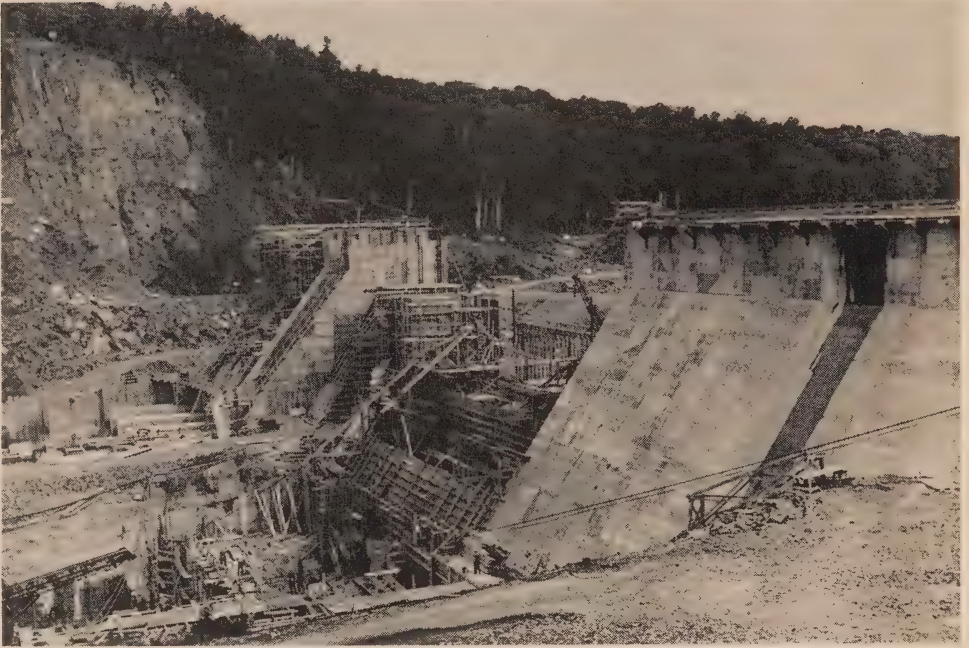
Construction on all sections of the main dam was begun in 1959. By the end of December, work on the powerhouse was sufficiently advanced to permit the erection of structural steel. Concreting of the sluiceways was completed except for the closure section, which will be concreted during the summer of 1960.

The larger part of the headpond area has been cleared and the remainder will be cleared in 1960.



RED ROCK FALLS GENERATING STATION — Waters of the Mississagi River pour through three of the seven sluiceways, by-passing the powerhouse area where construction is being carried out behind cofferdams. The first of two 26,500-brake-horsepower generating units is scheduled for service in late 1960.





**RED ROCK FALLS GENERATING STATION** — Construction is under way for a two-unit generating station at Red Rock Falls on the Mississagi River about 15 miles down stream from George W. Rayner Generating Station. The new station will consist of a concrete dam about 920 feet in length, which will incorporate a powerhouse and headworks adjoining the east bank of the river and a sluiceway section of 7 sluices on the west bank. By mid-summer 1959, nearly 40 per cent of the total concrete required had been placed.



**RED ROCK FALLS GENERATING STATION** — By early August, excellent progress had been made on all phases of construction at Red Rock Falls. Concrete for five of the seven sluiceways had been placed, and the centre gravity section was about 50 per cent complete. Taken from the west bank, this picture shows the site in its third and final stage of construction.

ABITIBI CANYON GENERATING STATION (Capacity 226,000 kilowatts in 5 units)

The installation of a 45,000-kilowatt, 60-cycle unit was completed. It became the fifth unit in service at this station when it was placed in service in 1959. The new generator is in the position formerly occupied by a 25-cycle unit which had been removed to DeCew Falls Generating Station to meet urgent power requirements during World War II. It will be driven by the original hydraulic turbine now returned from DeCew Falls for operation under conditions for which it was specifically designed.

#### THUNDER BAY GENERATING STATION—FORT WILLIAM

<i>Location</i>	—North shore of the Mission River in Fort William.
<i>Installed Capacity</i>	—100,000 kilowatts in one unit, 60 cycles.
<i>In-Service Schedule</i>	—1961.
<i>Estimated Cost</i>	—\$26,000,000, including generation, step-up transformation, and high-voltage switching at the site.

Work on the site up to grade level was completed during 1959. This included pile-driving and placement of concrete for foundations, the construction of the water-discharge channel and of most of the intake for the circulating-water system, and, in addition, the dredging of the channel and the construction of the dock. Construction schedules were affected to some extent by the steel strike in the United States, but work was not seriously interrupted. Structural steel erection in the turbine area was completed; work is now proceeding in the bunker and boiler areas.

Most of the main items of mechanical equipment have been purchased. Orders were placed in 1959 for boiler-feed pumps, feed-water heaters, circulating-water pumps, induced- and forced-draft fans, fly-ash collectors, and the coal-handling equipment.

While the structural steel for the main building was being erected, the turbine-house crane was installed and the deaerator was completed. The main circulating-water pipework was also installed. Installation of the steam generator is scheduled to commence in March 1960, and installation of the turbo-alternator in September.

#### SILVER FALLS GENERATING STATION—KAMINISTIKWIA RIVER

<i>Location</i>	—30 miles northwest of Fort William.
<i>Dependable Peak Capacity</i>	—45,500 kilowatts in one unit, 60 cycles.
<i>Rated Head</i>	—330 feet.
<i>In Service</i>	—September 1, 1959.
<i>Cost at December 31, 1959</i>	—\$16,300,000, including generation, step-up transformation, and high-voltage switching at the site.



The main storage reservoir and headpond for Silver Falls Generating Station is Dog Lake, situated to the north and west of Fort William in the Kaministiquia River watershed. This part of the watershed receives an average annual inflow of 1,000 cfs, which can be used at a rated head of 330 feet at Silver Falls Generating Station. The powerhouse, located on the north shore of Little Dog Lake, thus exploits the greater part of the 347-foot fall occurring in the 4-mile stretch of the Kaministiquia River between Dog Lake and Little Dog Lake to the south.



As early as 1907, the possibility of developing power in this section of the river was being discussed by the Commission as a means of providing for expected industrial expansion in the Lakehead area. Early investigations indicated the advisability of a plan of the type that was eventually to be followed, the construction of a hydraulic tunnel through the height of land between Dog Lake and Little Dog Lake. Repeated exploratory drilling over the past fifty years, however, had failed to establish the presence of competent rock through which the tunnel could be driven. The Silver Falls development was therefore passed over in favour of more promising projects.

With power demands continuing to grow, the Commission resumed investigation of the Silver Falls site in 1956, using a seismic exploratory method. A ridge of competent rock was located, and a satisfactory tunnel line was established. In March 1957, clearing of a construction camp area was begun. In October of the same year, tunnel excavation commenced. By August 1958, excavation of the tunnel was complete, and by February 1959, some 9,000 feet had been concreted.

By April, steel erection in the powerhouse area was nearly finished, and installation of the turbine was under way. During the summer months an

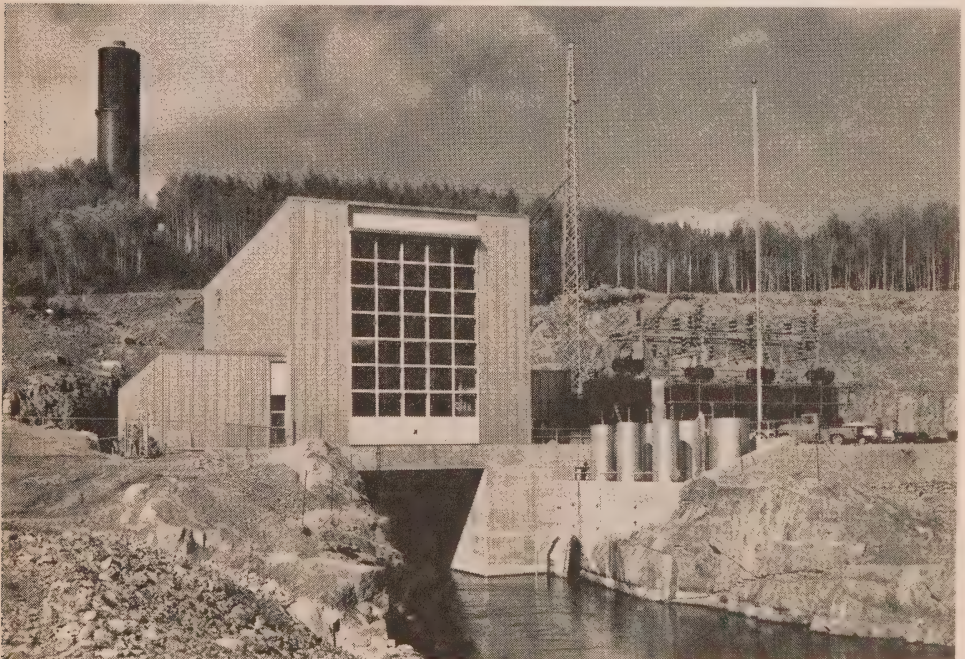
extensive rehabilitation program was carried out on a number of control dams which regulate the water-level in Dog Lake. The generating unit was mechanically and electrically tested in August, and the station was placed in service on September 1.

#### **Headworks, Penstock, and Tunnel**

An intake canal, extended by the excavation of a channel some 500 feet into Dog Lake, carries water to the conventional headworks approximately 400 feet from the shore of the lake. The headworks structure provides an intake 22 feet wide between two piers 6 feet in thickness and rising to deck level. Three sets of steel-lined checks in the piers accommodate conventional trash-racks, service gates, and a headgate. Protection from ice pressure during the winter is afforded by a curtain wall 6 feet thick extending down from deck level up stream from the service gate. The transition from rectangular to round cross-section in the water passage is completed approximately 32 feet down stream from the headgate.

A vertical shaft, lined with a minimum of 18 inches of concrete, and  $14\frac{1}{2}$  feet in inside diameter, carries the flow to the tunnel proper. This is of similar construction, having its invert  $302\frac{1}{2}$  feet below the level of the inlet floor. The tunnel is level for approximately 9,660 feet to the point where it joins the steel penstock. The penstock, varying in diameter from  $14\frac{1}{2}$  to 9 feet, conveys the water 486 feet to the scroll-case inlet which is sufficiently below the level of the tunnel to permit complete drainage of the system.

The effect of high pressure created in the tunnel by sudden increases or decreases in flow with fluctuations in load will be reduced by the operation of



**SILVER FALLS GENERATING STATION** — On September 1, 1959 this 45,500-kilowatt generating station was placed in service. Located on the Kaministiquia River about 30 miles from Fort William, the single-unit station supplies power to customers in northwestern Ontario.





**SILVER FALLS GENERATING STATION** — Shown here in its final stage of construction, the surge tank is located directly over the hydraulic tunnel supplying water to the station, and is connected to it by a shaft 204 feet deep. Beyond the tank the single-unit generating station assumes its finished appearance as construction forces complete the excavation for the tailrace.

a standpipe surge tank located approximately 900 feet from the station. A sudden increase in flow, for example, will be drawn from the surge tank until flow in the tunnel attains the required velocity. The surge tank has three main parts—a steel riser  $14\frac{1}{2}$  feet in diameter descending 90 feet through rock into the surge shaft, an extension of this riser  $12\frac{1}{2}$  feet in diameter and rising 170 feet above ground, and a 175-foot shell 38 feet in diameter enclosing the upper riser. A conical steel roof covers the outer shell, and a monitor with screened louvers at the apex of the roof allows free passage of air during surges. Ports in the inner riser permit flow into and out of the outer shell. The interior of the tank shell is accessible for inspection through a manhole at grade level.

The straight-flow inlet valve, 9 feet in diameter, is connected to the scroll-case inlet by a “Dresser” type flexible coupling. This valve, the first of its kind installed by the Commission, is particularly suitable for suddenly shutting off flows of high velocity, the valve door cutting through the water like a knife. Since the valve is operated by a water-pressure servo-motor fed from the upstream side, it is not dependent on any outside source of pressure which might fail under emergency conditions.

#### **Powerhouse Substructure**

The substructure for the single vertical-shaft unit is of conventional design with steel scroll-case and elbow-type draft-tube. An intermediate pier dividing the draft-tube exit extends upward and partially supports the floor of the erection bay which is over the downstream extension of the draft-tube. A bridge crane provides hoisting service for the inlet valve, for the transformers, and for the



tailrace stoplogs, access to the valve and transformers being provided through hatchways in the generator-room floor.

### **Superstructure**

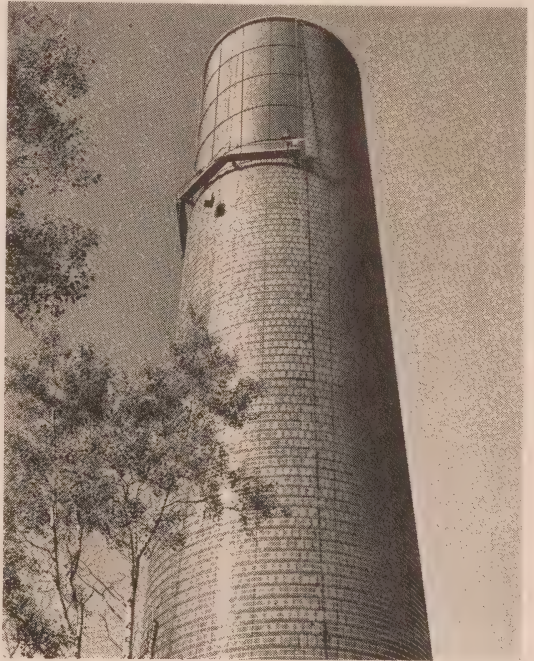
The superstructure encloses the entire generator floor. The central section is higher than the two flanking sections to permit the overhead service crane to traverse the generator floor along the axis of stream-flow. This crane, powered by electricity, has a main hoist capacity of 175 tons and an auxiliary capacity of 25 tons.

### **Main Station Equipment**

A Francis-type turbine rated at 60,000 bhp is directly connected to a 13.8-kv, 60-cycle generator operating at 240 rpm. The turbine was manufactured by Canadian Allis-Chalmers Limited. The generator was manufactured by Canadian Westinghouse Company Limited and is rated as a generator at 50,000 kva, 0.90 power factor, or as a synchronous condenser at 30,000 kvar at zero power factor.

A bank of three 13,000/17,333-kva, single-phase transformers, located adjacent to the powerhouse, steps the generator voltage up to transmission level. Power is incorporated into the system by a single-circuit steel-tower transmission line 8.8 miles in length linking Silver Falls Generating Station with the Moose Lake-Port Arthur line at a point about 20 miles from Port Arthur.

The station is remotely controlled from Port Arthur Transformer Station No. 1 by means of supervisory control signals transmitted by power-line carrier over the 115-kv line. Telemetering signals transmitted over these channels indicate hydraulic, mechanical, and electrical conditions. Other power-line carrier channels are used for line relaying, transformer protection, and voice-duplex communication, the latter being terminated in the local telephone systems at Silver Falls Generating Station and Port Arthur Transformer Station No. 1. A fixed radio station for mobile despatching and emergency use has also been installed.



**SILVER FALLS GENERATING STATION**—A surge tank towers 175 feet in the air behind the generating station. With a capacity of 1.2 million gallons of water, the tank acts to relieve the tremendous pressures which would be created in the 10,500-foot hydraulic tunnel as the result of sudden reductions in flow through the unit.

## **Transformer Stations and Transmission Lines**

The Commission spent approximately \$4 million on extensions and improvements to transformation and transmission facilities in northern Ontario during 1959. A number of major items of equipment were placed in service in both the Northeastern and the Northwestern Division, which improved system stability and provided greater security to customers.

### **Northeastern Division**

According to present plans, the output of new generating stations on the Abitibi and Mattagami Rivers in the northeast is to be incorporated into the system by means of a central gathering transformer station and eventually transmitted to load centres in the south over a 460-kv transmission line. The line will be operated initially at 230 kilovolts. During 1959, approximately 100 miles of a route for this line were surveyed between Abitibi Canyon Generating Station and Timmins. In the course of the year also, a third 18,750-kva transformer was installed at North Bay Transformer Station, while 10,000 kvar of static capacitors and two 5,000-kva synchronous condensers were placed in service at Quirke Lake Transformer Station. These latter installations will serve to minimize voltage fluctuations in the uranium mining area near Blind River. Voltage control to customers served from Kapuskasing Transformer Station was also improved with the installation there of a 30,000-kva, 13.8-kv, voltage-regulating transformer. Two 115-kv oil circuit-breakers were installed at Monteith Transformer Station early in the year to complete the transmission arrangements for the 60-cycle generating unit placed in service at Abitibi Canyon Generating Station.

### **Northwestern Division**

During 1959 the output of Silver Falls Generating Station was incorporated into the system by means of a 115-kv steel-tower line approximately 9 miles in length. The line, built to Conmee Junction on the 115-kv line from Port Arthur Transformer Station, was erected on a new type of steel tower developed by Commission engineers and proved to be competitive in cost with wood-pole structures. The tower design, while providing the advantages of steel in decreased maintenance costs, approaches the combination of loading obtained on wood poles. Its slender shape, long-span capability, and low-cost foundations make it well suited to the rough country of northern Ontario.

A new 17-mile, 115-kv transmission line was also placed in service during the year between Dryden Transformer Station and Sunstrum Junction. It has improved service security to customers in Hudson Townsite and Sioux Lookout who were previously served from Ear Falls Generating Station over 85 miles of 44-kv transmission line. Further improvements to both steady-state and transient stability on the 115-kv network linking Kenora Switching Station, Dryden, Fort Frances, and Moose Lake Transformer Stations were undertaken during 1959. The line betterments carried out involved the application of carrier relaying, high-speed reclosing, and the replacement of four 115-kv circuit-breakers with faster-operating units.

## SECTION VI

### RESEARCH AND TESTING ACTIVITIES

**T**HE staff of the Research Division and the research and testing facilities of the Commission's laboratories are available to serve all branches of the organization in finding solutions to the needs and problems of power-system operation. Certain activities dealing with design, construction, operations, maintenance, and miscellaneous testing are discussed briefly here. Many of these items have been treated more extensively in the Commission's quarterly publication *Research News*.

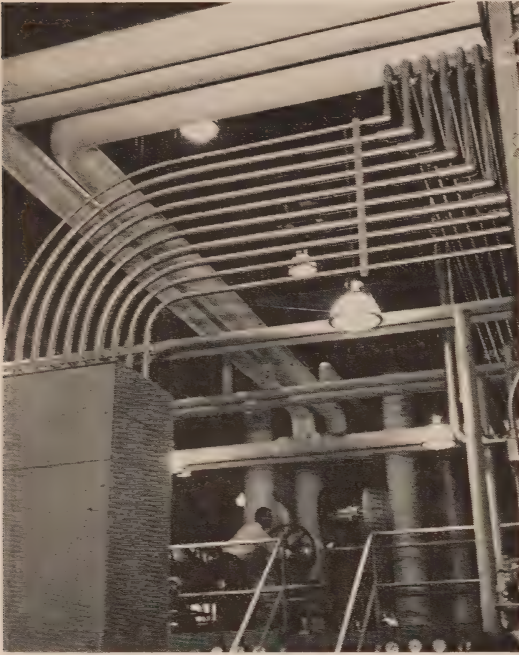
#### AIDS TO DESIGN WORK

##### **Extra-high-voltage Transmission**

Important advances were made in studies related to the design of extra-high-voltage transmission line. Of particular significance were the extension and improvement of formulae for predicting corona losses at any operating voltage when using various conductor configurations under a range of weather conditions. Present expectations are that data from the Commission's Coldwater test project will provide the required constants for the new formulae. Information on



weather conditions as normally reported is not as precise as other data used in these calculations. The greatest uncertainty in corona calculations will relate, therefore, to weather predictions.



Part of a loop system designed to test the flow of coolant over fuel rods in simulated fuel channels at the A. W. Manby Service Centre. The equipment is being used by the Nuclear Power Plant Division of Atomic Energy of Canada Limited as part of the program to develop nuclear-electric generating stations in Canada.

Specialists in the high-voltage transmission field throughout the world have held differing views about applying to long operating lines radio-interference data from short test lines. This difficulty has been met by detailed study and analysis leading to a specific solution which is applicable to the Coldwater project. Now for the first time, radio-interference data provided by experiments on the short test line can be used with confidence to predict the extent of radio interference that will be created by a long operating line. Furthermore, current-leakage losses across the suspension insulators supporting the line conductors were differentiated from the corona losses. Measurement of actual insulator losses under bad weather conditions has not yet been achieved.

#### **Air-break Switches as Possible Substitute for Costlier Equipment**

Air-break switches are not specifically intended to function under load, and they have no rating for switching purposes. If they are used for switching operations, power arcs on occasion flash across to adjacent grounded parts, and cause circuit interruptions. A study was made of the limitations of switches and of the behaviour of the arcs when switches on either 115-kv or 230-kv systems are operated. Switching operations were recorded over a period of approximately two years, whenever circumstances permitted. The records were made with a moving-picture camera supplemented with an oscillograph. The films and oscillograms confirmed that arcs occurring during air-break switch operations are typically erratic. They also revealed the effects of uncontrolled variables, that of wind in particular being the most significant. The arc evidently has a certain maximum "reach" in the direction of the wind. The results of the study indicate that if suitable installation clearances were provided and operating precautions were observed, air-break switches could be used in many instances instead of more costly switching equipment.

#### **Metals and Metallic Coatings Resistant to Atmospheric Corrosion**

A long-term test program was begun in 1952 for the purpose of investigating the relative resistances to atmospheric corrosion offered by various metals and

metallic coatings. In that year, three sets of test specimens were placed on racks outdoors—one in an industrial area, one in a particularly humid location, and one in rural surroundings. As promising new materials become available,



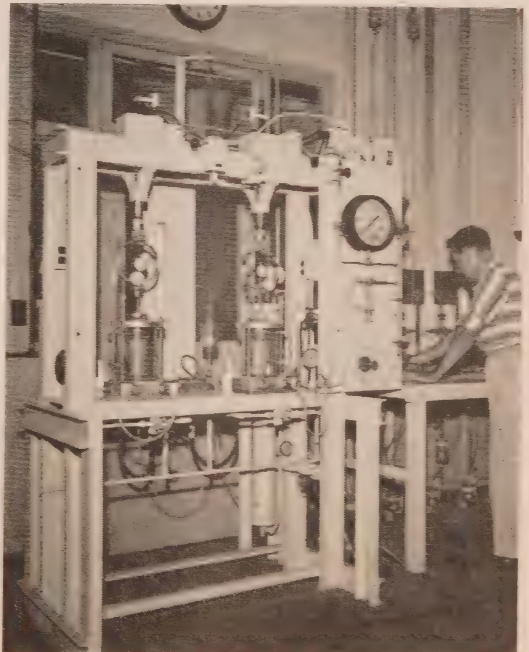
A Commission technician checks instruments for measuring air pollution in Metropolitan Toronto. The instruments indicate the extent of fallout of dust and the degree of prevalence of sulphurous gases in the air.

they are included in the test in order that their acceptability for use can be evaluated. In general, aluminum and aluminum-coated steels are proving the most resistant to corrosion. Galvanized coatings of different types are next in order of resistance, all showing resistances roughly in proportion to the zinc-coating thickness. Uncoated steels, including wrought iron, undergo comparatively rapid corrosion, though in low-alloy steels the rate of corrosion is somewhat retarded by the presence of chromium and copper. Anodized aluminum,

stainless steel, and a tin-nickel electroplate coating have been least affected by atmosphere in the industrial area, whereas cadmium coatings in the same environment have corroded about as rapidly as uncoated steels. The observations are proving a valuable aid in design and are contributing to improvement in maintenance.

#### Shear Strength of Compacted Soil

In view of the extensive use of compacted earth materials in construction, it becomes highly desirable to have some means of accurately measuring their shear strengths. Because of their entrapped-air content these materials have presented much difficulty in shear testing. One approach to a solution of the problem involved an extensive series of tests which used a variety of techniques and methods to determine the shear strength of a remoulded saturated soil consolidated in the laboratory. The



Triaxial soil-testing equipment used to determine soil behaviour, particularly its compressive strength at various moisture contents, densities, and degrees of saturation



test results will serve as a basis for shear-strength studies of compacted soils both saturated and partially saturated.

### **Pole Strength**

For design purposes, the ultimate fibre stress in wood poles of the species used by the Commission has been verified in recent years by bending tests carried to the point of pole failure. Comparison of the results with those from corresponding tests on small clear specimens removed from the poles indicated that specimen testing would be adequate by itself to predict pole strength. Consequently, in 1959, small clear specimens were used in sampling tests of poles prior to preservative treatment. The results confirmed that the stresses being used for design purposes satisfactorily reflect pole strength.

## **CONSTRUCTION PROBLEMS**

### **Concreting Practices**

As the result of the application of recent technological developments and the accumulation of test data applicable to current problems, concreting practices were changed. Allowance for normal variability was incorporated in the specification clause dealing with compressive-strength tests. In order to improve safety and increase economy in construction, concreting requirements under winter conditions were made more stringent for situations where early loading of structures or parts of structures is required, and were relaxed for certain less critical circumstances. A study was made of temperature conditions in masonry piers constructed under severe winter conditions; this, together with observations of the performance of mortar frozen at various early ages, is helping to clarify the precautions necessary in cold-weather construction.

For mass concrete, the Commission is making progressively greater use of fly ash to replace part of the cement, and greater use of lignin which, in addition to retarding the setting, is effective in further reducing the cement requirement. The use of these materials reduces temperature rise during curing, and hence decreases the cooling shrinkage of mass concrete. The success achieved with their use in the ice-sluice girders at Robert H. Saunders-St. Lawrence Generating Station prompted extension of their use for the construction of scroll-case roofs at Whitedog Falls and Caribou Falls Generating Stations. The slower-setting, low-shrinkage concrete made possible the placing of each scroll-case roof as a single unit instead of as four segments. The advantages included major savings in construction time, and the elimination of many vertical joints with their costly form bulkheads. This type is being used with significant economies for essentially all concrete at Otter Rapids, the fly ash being supplied, in part, from Richard L. Hearn Generating Station in Toronto.

### **Underwater Placing of Earth Fill**

To investigate the wet method of earth-dam construction, observations were made of a number of cofferdams consisting of glacial till dumped into water up to 40 feet in depth. In the investigation the factors of safety of various sections of the cofferdams were determined and related to in-place properties and to piezometer readings where obtained. The results indicate that the wet method of earth-dam construction is comparable to construction in the dry in



multiple lifts. Since the cost of the wet method is considerably lower, further study is to be made of the method and of the behaviour of completed cofferdams for which it was used, with a view to extending the method to the construction of permanent structures.

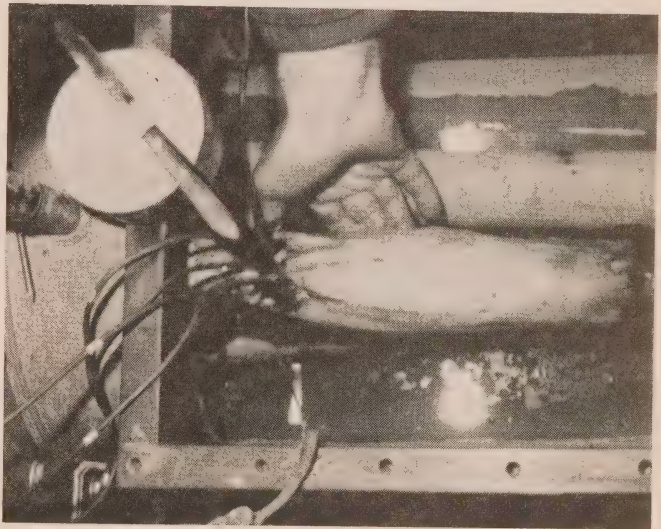
#### AIDS TO OPERATION

##### Niagara River Flow Variations Caused by Wind

Variations in the flow of the Niagara River, often as large as 40,000 cubic feet per second, occur when the wind causes a change in the level of Lake Erie. In scheduling water diversion for power generation, allowance must be made for these variations. At the present time, in order to avoid violations of the Niagara Diversion Treaty, considerably more water than the stipulated minimum

is allowed to flow over the falls. If this flow is to be kept as close as possible to the stipulated amount in order to provide maximum water diversion for power purposes, precise programming is required. As a preliminary step, a survey of flow variations in the river was made, using highly sensitive water-level gauges. The data, after analysis, will be used in the development of an electronic analogue computer designed to simulate, in advance,

the flow variations of the river. The information supplied by the simulator will enable more precise programming to be achieved.



Strain gauges covered by protective coating are used to study stresses in the lead sheath of an underground high-voltage cable circuit. Stresses are caused by temperature changes resulting from variations in the load carried.

##### Modification of Gas-actuated Relays

A modification applied to a large number of gas-detection relays in service is giving good performance. These relays are used on power transformers of the higher ratings as a protective measure against damage due to faults in the transformer. They are designed to actuate an alarm for small faults that result in a slow generation of gas, and to de-energize the transformer for larger faults that cause a rapid generation of gas. A "surge" element provided for the purpose of detecting the rapid gas-generating condition has tended to become inoperative in a relatively short time. This is brought about when the required cushion of air in the relay surge chamber is absorbed by the relatively air-free transformer oil. Based on a series of tests, the modification which has been developed overcomes this difficulty, and also makes readily possible quite accurate field checks of the performance of the surge element.

## RESEARCH TO FACILITATE MAINTENANCE

**Underground Cable Corrosion**

Self-regulating rectifiers developed to provide cathodic protection for the lead sheaths of underground cables were applied at three places along the route of the 115-kv circuits between the Humber River and Toronto-Strachan Transformer Station. Polarization cells, developed earlier for use with pipe-type cables, supplement the action of the rectifiers. The stray currents in these areas vary rapidly. Prompt and accurate adjustment of the protective currents is therefore necessary, and effective grounding of the sheaths at the terminals is essential for safety. The self-regulating rectifiers and polarization cells respectively meet these requirements with a minimum of maintenance.

**Photographic Examination of Cable-duct Interiors**

Following the discovery of some obstruction in unoccupied 4-inch cable ducts of the duct banks carrying the 115-kv cables under the Frederick G. Gardiner Expressway in Toronto, it was necessary to develop a camera suitable



A camera designed to photograph the interior of 4-inch cable ducts is carefully inserted into a duct which is suspected of being damaged. By means of the camera, the exact location and extent of the damage can be determined without costly excavation.

for photographing duct interiors of these dimensions. A camera previously developed for examining  $6\frac{3}{4}$ -inch bore-holes was too large. The new camera was contrived from a war-surplus aircraft motion-picture camera, the shutter being altered to allow the taking of from 500 to 600 still pictures with one loading. The photographs obtained showed that the duct banks had been sheared as a result of earth pressures and that immediate excavation was necessary to avoid damage to

cables in other ducts. As an aid in planning remedial action, the camera, restored to cinematographic operation, was used to expeditiously photograph the walls of about a thousand feet of duct.

**Protective Coatings**

Certain areas in the Nuclear Power Demonstration plant may be exposed to cumulative or to accidental radiation contamination. The coatings on concrete walls and ceilings in these areas must be resistant to degrading due to the effects of radiation, and must be able to withstand vigorous steam cleaning and caustic-solution decontamination procedures. Tests made elsewhere had indicated that vinyl coatings were superior to a number of other polymeric coating materials in resistance to radiation. On the strength of this information a vinyl coating system was developed, based on commercially available products suitable for application to concrete surfaces. A vinyl emulsion sealer applied to the concrete



is followed by a multi-coat vinyl lacquer finish. The combination provides outstanding appearance, impermeability both to radioactive dust and to water, and excellent resistance under decontamination procedures.

In order to assist in the preparation of specifications for protective coatings for various specialized applications in thermal-electric generating stations, studies were made of coatings for tanks, both steel and concrete, for holding demineralized water and condensate, of stack-lining coatings, and of factory-applied decorative coatings for aluminum siding. A number of more conventional high-temperature and anti-corrosion applications were also studied.

#### **Appraisal of Aerial Ladders**

Prior to purchase, truck-mounted aerial ladders required for use in forestry work, line maintenance, and insulator washing are tested in performance and appraised in relation to Commission requirements. Although not considered live-line tools, they are also tested to determine the degree of electrical protection they provide for those working close to live circuits. Three main types are available, differing as to the means of elevating, extending, or rotating the ladder—manual, semi-hydraulic, and hydraulic. The ladders are statically loaded at various angles of elevation to check structural strength and stability. Hydraulic safety devices, rung locks, and various other locks and interlocks are appraised and checked. The necessary improvements in design, operating characteristics, or safety precautions which may be required by the Commission are on occasion incorporated for standard models.

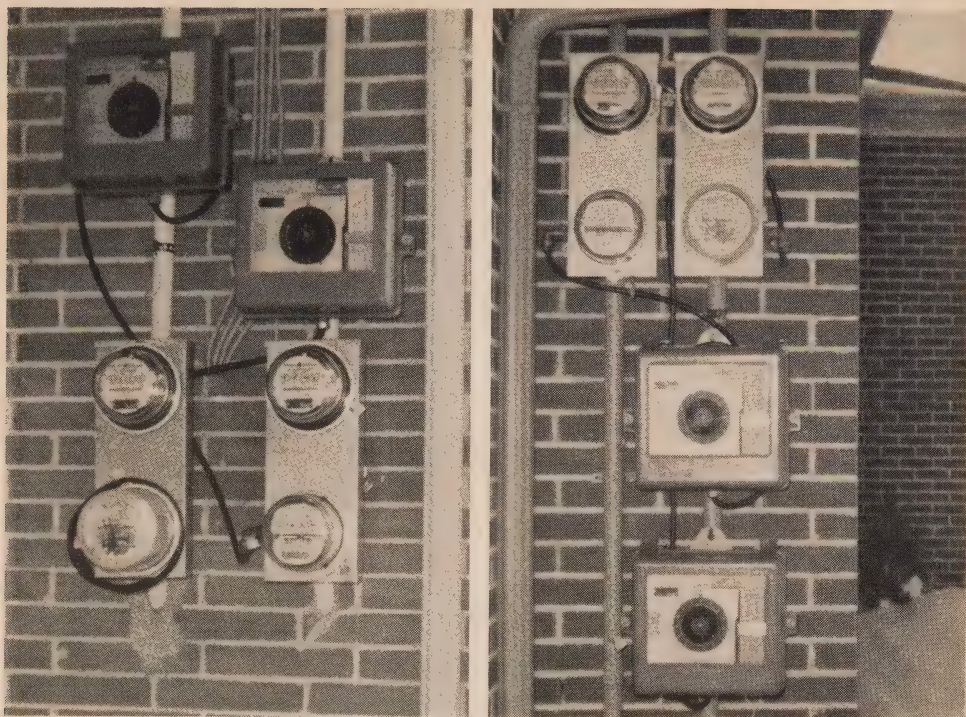
#### **Small-diameter Soniscope Transducers**

The recent development of much simplified small bore-hole transducers has greatly extended the field of application of the soniscope in detecting deterioration or internal cracking in concrete structures. Until fairly recently the measurement by soniscope of ultrasonic-pulse velocities had been limited to those parts of dams under 60 feet in thickness and to smaller structures having opposite faces accessible to pairs of soniscope transducers. Even with the subsequent development of large bore-hole transducers which extended the scope of surveys of major dams, there remained the question of cost of drilling 6¾-inch-diameter holes to accommodate the transducers. The development of transducers capable of operating in holes of 2-inch diameter reduces the cost of drilling and greatly increases mobility through the use of portable low-cost drilling equipment.

#### **Evaluation of Grinding Wheels**

Grinding stones used in the repair of hydraulic turbine runners must be selected with a view to providing an acceptable surface finish in the minimum of time. The high cost of skilled labour for grinding and the possible revenue loss while the equipment is out of service are highly relevant considerations. A machine was designed to test the capability of different stones for removing welded overlay metal from runners. It simulates the three basic motions followed by operators in manual grinding, for practical ranges of pressures, speeds, and angles. Investigation indicated that grinding rates of some makes of stone were three times those of others. This and other related information obtained will contribute to increased efficiency in turbine runner repairs.





Arrangements of the meter panel on two of 50 houses included in a space-heating load survey

## OTHER INVESTIGATIONS

### Electric Water-heating

In a survey of water-heater loads of about 50 domestic customers, all located in the same general area, preliminary results indicate that group demands for fast-recovery water-heaters are satisfactory, being far less than had been expected. The Commission is also providing assistance with analysis of data obtained, and guidance on statistical sampling requirements to certain municipal utilities making detailed inventories of electric water-heaters supplied, or conducting sample surveys—of the energy consumption of domestic water-heaters, for example.

Recommendations of the most suitable water-heater tanks for various municipalities were made on the basis of analytical study of water samples, taking into account experience in the field. Some relatively unstudied water samples from the more northerly part of the Province showed unusual characteristics in this application. Electro-chemical tests of some twenty samples were made as a guide to suitable tank selection.

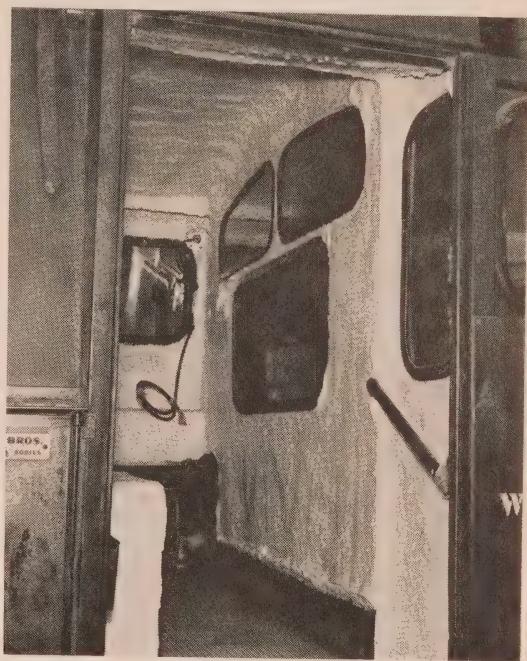
### Reserves of Large Power Transformers

An operations research team studied the Commission's reserve transformer requirements. Analytical methods were developed for determining, first the

numbers and types of spare transformers required as a reserve against transformer failure in stations, and second the economic retention policy for transformers removed from service. A data-classification system using punched cards was established. Selected data on all large power transformers, including such information as location, physical characteristics, manufacturer, age, and failure record, can readily be obtained by use of the system.

### Quality Control of Wood-pole Preservatives

In order to meet continuing requirements, the Commission annually purchases about 60,000 wood poles. These are preservative-treated with a solution of pentachlorophenol in petroleum oil at commercial treating plants in Port Arthur, Sudbury, and Trenton, at each of which it has been necessary in the past to maintain a chemical technician to analyse the treating solutions used. In order to reduce the cost of these control analyses, which were performed by a time-consuming lime-ignition method, a reliable infra-red spectro-photometric method of analysis was developed. This method was used during the past year for the rapid analysis of samples sent daily by air or rail express from the treating plants to Toronto. Results were reported by telephone to the pole inspector at the plant within 24 hours of sampling. As a result, the cost of maintaining an analyst at each plant has been eliminated and, because of the rapidity of the method, the analysis cost per sample has been greatly reduced.



The crew compartment of one of the Commission's specially built line trucks. The interior has been sprayed with urethane foam so that in cold weather, heat is conserved and moisture is prevented from condensing on the walls, with consequently greater comfort for the occupants.

### Fly-ash Utilization

That it is technically feasible to produce a lightweight aggregate from fly ash collected at Richard L. Hearn Generating Station was established by means of a large-scale plant-production trial. This is a significant development in view of the problem of disposing of fly ash produced at coal-burning thermal-electric generating stations. The aggregate was produced from fly ash prepared in the form of moistened pellets and sintered in a travelling-grate furnace. A study of economic factors, however, demonstrated that conditions are not yet suitable for practical commercial production.

Studies were continued on the use of mixtures of lime and fly ash for road construction. A field-scale test base course completed at the A. W. Manby Service Centre indicates favourable performance to date. Plans were made for a more extensive field trial of the mixture in road-shoulder stabilization.



## SECTION VII

### STAFF RELATIONS

**T**HE Commission's high standard of dependable service is based primarily on the engineering and administrative skills of its highly qualified professional staff, and the loyalty and integrity of all employees throughout the organization. These qualities are best exemplified under critical conditions such as those experienced in the severe sleet storms during the closing days of 1959 and the early weeks of 1960. Many generous tributes were paid publicly and privately to Commission employees for their willingness, skill, and energy in restoring service as speedily as possible under extremely trying conditions.

#### **Employment Statistics**

The maximum number in the Commission's employ during 1959 was 17,076 in July, when there were 3,900 temporary employees engaged for the most part in construction, then at its peak for the year. These totals were considerably smaller than the respective totals of 18,731 and 4,759 for 1958. The average monthly payroll for 1959 was 15,866, including 13,210 regular and 2,656 temporary employees, which represents a 10.4 per cent reduction from the 1958 average.



#### OCCUPATIONS OF UNUSUAL INTEREST

- Left: A skin-diver emerges from the water after checking rock placement for the Lakeview Generating Station breakwater.
- Right: Commission surveyors mount a tellurometer on its tripod in preparation for a survey in northeastern Ontario. This electronic device, which cuts survey time and cost, emits microwaves which are received by a remote unit and returned to the master unit.

#### Manpower Planning and Development

Recruitment of staff was comparatively limited during 1959 as the Commission dealt with the continuing problem of relocating personnel who had become surplus as the result of organizational change, the introduction of automatic operation, or the completion of large projects. The relocation of 260 employees in this way made outside recruitment for the most part unnecessary except for quite junior positions or for positions requiring specialized skills. During the year, thirty-one 1959 graduates were recruited from various universities for the Engineers Training Course, and twenty-seven former members of the course were transferred to regular positions elsewhere in the Commission.

Participation in employee training continued at a high level throughout the year. Members of the staff in senior management have availed themselves of the opportunity to broaden their experience at various management conferences and seminars. A series of seminars was arranged by the Commission for members of the engineering staff. Nearly a hundred employees participated outside normal working hours in these courses involving general business administration, economics as related to Commission activities, and problems associated with the operation of power systems. Other employees have responded with commendable interest to the Commission's offer of financial assistance in extramural study leading to improvement in academic and professional qualifications. In all, close to 600 persons in management and supervisory positions took part during the year in courses designed to assist them in improving the effectiveness of their work.





**RED ROCK FALLS GENERATING STATION** — A number of construction workers and their families are comfortably housed in attractive surroundings near the power site at Red Rock Falls. More than 400 employees of the Commission were at work here at the end of 1959.

Approximately 700 tradesmen took formal training in addition to the on-the-job instruction regularly offered. A large part of this training is given at the Conference and Development Centre in Niagara Falls. Indeed, almost 900 of the persons taking formal instruction, administrative and trades employees alike, received all or part of their training at the Centre.

#### **Industrial Relations**

The Commission's employees bargain collectively through three agencies—the Ontario Hydro Employees Union which is affiliated with the National Union of Public Service Employees (CLC), the International Union of Operating Engineers, and the Allied Construction Council (AFL-CIO-CLC).

Prolonged negotiations with the Employees Union for renewal of the contract expiring in 1958 concluded with the signing of a memorandum of understanding on February 26, 1959 following the submission of a Conciliation Report. The contract subsequently signed was for a two-year period expiring March 31, 1960. A new job evaluation plan, developed jointly by the Commission and the Union for clerical and technical employees, was introduced in September. Implementation should be complete by the spring of 1960. More clearly defined lay-off and recall procedures have been established in order to deal appropriately with staff surplus created in unusually large numbers by the closing of major projects.

Negotiations with the International Union of Operating Engineers were completed with the signing of two one-year agreements, the first with two locals



and effective until June 30, 1960, the second with one local and effective until July 31, 1960.

Bargaining with the Allied Construction Council was complicated by disputes arising between the Council and the Building Trades Councils in Toronto and at the Lakehead respecting their rights to represent construction workers at the Lakeview and Thunder Bay Projects. The former agreement expired July 31, 1958. The jurisdictional disputes were resolved by the recognition that the Allied Council had bargaining rights, and the settlements eventually reached with the various groups established a new wage formula based on wage rates generally in keeping with those of the areas in which the particular construction projects are located. Following the completion of Sir Adam Beck-Niagara Generating Station No. 2, the agreement with respect to this project, the first to be negotiated with the Council, was allowed to lapse. It had been in effect since March 4, 1951.

#### **Industrial Relations Service for Municipal Electrical Utilities**

At the request of the Ontario Municipal Electric Association, and in conjunction with the Employee Relations Committee of the Association of Municipal Electrical Utilities of Ontario, an industrial relations service is being provided for municipal utility management. Seminars in labour relations have been attended by managers representing 90 municipal systems. Meetings on labour management relations have been planned for utility superintendents and foremen. Any of the associated municipal utilities can obtain advice from the industrial relations service group on specific labour relations problems.

#### **Accident Prevention**

The Commission recognizes the need for unceasing effort in the campaign to improve the observance of safety regulations and thereby reduce the loss in time and human suffering attributable to accidents. It is gratifying to note that the ratio of frequency of accidents to man-hours worked showed considerable improvement in 1959. The average of 13 accidents causing lost time, of at least one shift, per million man-hours worked compares favourably with the average of 21 in the five-year



The Commission continually stresses all aspects of accident prevention and safety. This sign erected beside the access road at Otter Rapids Generating Station reminds everyone that a hard hat may save a life.

period 1954-58. The index of severity of injuries in 1959, measured by the American Standards Association method, was just over half the average index for the previous five years. The proportion of man-hours spent on the more hazardous type of construction may have been somewhat smaller in 1959 than

in any of the previous five years. Nevertheless, the improvement achieved is convincing evidence of the good effect of training in safe practices and improved work procedures. The Niagara Region staff established a notable record during the year in reducing lost-time accident frequency in the region to one per million man-hours worked. The Eastern Region staff completed over a million man-hours of work without an injury involving lost time. This outstanding achievement was appropriately recognized on May 26, 1959 when the Chairman of the Commission presented the National Safety Council's Award of Merit to O. S. Luney, the Regional Manager, who shared the honour with the Regional Safety Officer, G. R. Shannon.

The frequency rate of motor vehicle accidents declined by 7 per cent during 1959 and was 19 per cent below the 1955-58 average.

Four employees escaped serious injury through the use of protective equipment, two by the wearing of hard hats and two by the use of safety glasses. Members of the Commission's staff, by the application of artificial respiration, were able to save two persons from possible death. Mr. Firmino De Lazzer of the Construction Division was awarded the National Safety Council President's Medal for his part in the rescue of a young woman from drowning, and a Canadian Electrical Association resuscitation award was made to the Ear Falls Generating Station staff for resuscitating Mr. Karlis Vitols from electric shock.

#### **Medical Services**

The general health of the staff during 1959 compared quite favourably with the average of the population as a whole. Nearly 500 medical examinations in total were given during the year to a selected group of senior staff whose health has been kept under periodic review for the past several years. Administrative procedures for the sick-leave plan were simplified, in part to facilitate the change to electronic data processing.

The medical needs of construction projects were met through the services of a ten-bed hospital at Otter Rapids and by the operation of medical aid posts at Red Rock Falls and at the Thunder Bay and Lakeview thermal-electric projects. The medical aid post at Silver Falls Generating Station was closed in November. In Metropolitan Toronto, employees made over 12,500 visits to health service centres of the Commission, and the nursing staff made over 1,700 visits to homes or hospitals where members of the staff were confined by illness or injury.

First-aid instruction was given to approximately 4,000 employees during the year.

The Commission has established general regulations, including physical and age standards, for the protection of employees against ionizing radiation. These regulations will be kept under continuous review through the Medical Services Division.





## APPENDIX I—OPERATIONS

THE tables in Appendix I are supplementary to the descriptive information on the year's operations given in Section I, and to information relating to the delivery of power and energy in wholesale quantities given in Section III.

The tables of power demands and resources give for each system and in total the primary peak requirements for the month of December, and the dependable capacity of the Commission's resources at the time these peak requirements occurred. A separate table on pages 112 and 113 gives the dependable capacity and the actual maximum output of each Commission-owned station and each source of purchased power. The dependable capacity of a station is the net output which it can be expected to supply at the time of the system primary peak requirements, assuming that all units are available and that the supply of water is normal. This capacity may be recalculated from time to time in accordance with changing conditions. The capacity of a source of purchased power is based on the terms of the purchase contract.

The Analysis of Energy Sales on pages 116 and 117 shows how the kilowatt-hours generated or purchased by the Commission and the associated municipal utilities were distributed to the various classes of ultimate customers or to interconnected systems.

Beginning on page 118 there is a table dealing primarily with the power and energy supplied in wholesale quantities to the municipal electrical utilities and local systems. It also records the date when power was first delivered by the Commission to each as a separate municipal system. The peak loads shown are those for December, the month when municipal maximum requirements usually occur, and not the average of the monthly peak loads used in the Allocation of the Cost of Primary Power Statement.

Statistics of peak loads and capacities are given, as elsewhere in the Report, in kilowatts rather than in horsepower. The kilowatt figures may be converted to horsepower by assuming that one horsepower is equivalent to 0.746 kilowatts.

## THE COMMISSION'S POWER RESOURCES—1959

		Dependable capacity*	Maximum output*	Annual energy output (net)
Southern Ontario System		kw	kw	kwh
<i>River</i>	<i>Hydro-Electric Generating Stations</i>			
Niagara	†Sir Adam Beck-Niagara No. 1.....	441,000	430,000	3,257,332,900
	Sir Adam Beck-Niagara No. 2.....	1,336,000	1,284,000	8,009,378,300
	Pumping-Generating Station.....	168,000	132,000	111,449,900
	†Ontario Power.....	135,000	138,000	1,030,454,000
	†Toronto Power.....	108,000	97,000	561,337,900
Welland Canal	DeCew Falls No. 1.....	26,000	33,300	150,668,300
	DeCew Falls No. 2.....	130,000	135,000	762,497,400
Muskoka	Ragged Rapids.....	7,500	7,800	42,629,920
	Big Eddy.....	7,100	7,550	41,737,435
	Bala No. 1 and 2.....	350	.....	.....
South Muskoka	South Falls.....	4,200	4,400	29,241,540
	Trethewey Falls.....	1,600	1,700	11,239,200
	Hanna Chute.....	1,200	1,400	9,255,200
Beaver	Eugenia.....	5,400	5,180	20,450,600
Severn	Big Chute.....	4,300	4,410	28,427,600
Saugeen	Walkerton.....	350	.....	.....
	Hanover.....	250	252	1,098,263
Magnetawan	Burks Falls.....	250	132	505,400
Trent	Heely Falls.....	11,150	12,075	76,989,960
	Ranney Falls.....	8,350	8,765	54,408,640
	Meyersburg.....	5,100	6,000	38,661,680
	Sidney.....	3,350	3,500	21,503,400
	Hagues Reach.....	3,250	3,700	22,879,510
	Seymour.....	2,950	3,025	20,163,840
	Frankford.....	2,550	2,700	16,267,200
	Sills Island.....	1,550	840	5,928,900
Otonabee	Auburn.....	1,750	1,960	10,303,920
	Lakefield.....	1,650	1,440	8,972,260
	Renelon Falls.....	.....	.....	313,480
St. Lawrence	Robert H. Saunders-St. Lawrence.....	667,000	734,000	5,139,203,000
Ottawa	Des Joachims.....	372,000	373,800	2,161,421,700
	Otto Holden.....	210,000	220,500	1,127,654,700
	Chenault.....	117,000	116,000	713,632,600
	†Chats Falls (Ontario half).....	82,000	84,000	435,286,400
Madawaska	Stewartville.....	63,000	66,000	245,855,800
	Barrett Chute.....	42,000	42,000	214,801,200
Mississippi	Calabogie.....	4,400	4,440	25,486,800
	High Falls.....	2,450	2,800	13,706,400
	Galetta.....	800	820	4,327,480
Rideau	Merrickville.....	900	705	3,550,680
Total hydro-electric.....		3,979,700	.....	24,206,123,608
<i>Location</i>	<i>Thermal-Electric Generating Stations</i>			
Windsor	J. Clark Keith (steam).....	244,000	187,000	92,345,200
Toronto	Richard L. Hearn (steam).....	372,000	387,000	244,333,500
Total thermal-electric.....		616,000	.....	336,678,700
Total generated—Southern Ontario System.....		4,595,700	.....	24,542,802,308
<i>Sources of Purchased Power</i>				
Detroit Edison Company.....		.....	78,000	183,386,000
Polymer Corporation.....		.....	800	829,500
†Niagara Mohawk Power Corporation.....		.....	132,000	174,798,000
†Canadian Niagara Power Company, Limited.....		15,000	24,000	40,544,000
Power Authority of the State of New York.....		.....	.....	122,640,000**
Quebec Hydro-Electric Commission.....		187,000	417,000	2,467,949,000
Gatineau Power Company.....		239,000	252,600	1,467,784,500
MacLaren-Quebec Power Company.....		93,000	117,000	648,727,000
†Ottawa Valley Power Company.....		82,000	84,000	437,113,600
Miscellaneous (relatively small suppliers).....		2,000	1,200	6,322,109
Total purchased—Southern Ontario System.....		618,000	.....	5,550,093,709

† 25 cycle.

‡ 25 and 60 cycle.

\* The power capacity and output referred to in this table are 20-minute peaks for the month of December. Since the various maximum outputs do not coincide, their sum is not the peak load of the system.

\*\* Includes 114,693,000 kwh wheeled to Niagara Mohawk Power Corporation for Power Authority of the State of New York.

## THE COMMISSION'S POWER RESOURCES—1959

		Dependable capacity*	Maximum output*	Annual energy output (net)
<b>Northern Ontario Properties</b>				
<b>NORTHEASTERN DIVISION</b>				
<i>River</i>	<i>Hydro-Electric Generating Stations</i>	kw	kw	kwh
Abitibi	†Abitibi Canyon.....	226,000	220,300	1,223,182,400
Mississagi	George W. Rayner.....	47,000	47,600	254,928,650
Mattagami	†Wawatin.....	10,800	10,400	58,520,700
	†Lower Sturgeon.....	6,000	5,900	43,200,182
	†Sandy Falls.....	2,700	2,150	18,126,264
Montreal	Upper Notch.....	8,400	8,400	50,538,000
	Hound Chute.....	3,600	4,020	27,725,200
	Indian Chute.....	3,000	2,980	17,113,480
	Fountain Falls.....	2,000	2,000	14,965,660
Wanapitei	Stinson.....	5,700	5,280	24,857,580
	Conison.....	4,100	4,150	26,903,400
	McVittie.....	2,200	2,220	15,191,120
Matabitchuan	Matabitchuan.....	8,800	9,680	65,572,440
Sturgeon	Crystal Falls.....	8,200	8,200	45,599,700
South	Nipissing.....	1,600	1,610	10,522,200
	Elliott Chute.....	1,400	1,400	6,336,770
	Bingham Chute.....	900	910	4,950,980
Kagawong	Kagawong.....	.....	680	3,539,510
Total hydro-electric.....		342,400	.....	1,911,774,236
<i>Location Diesel-Electric Generating Stations</i>				
Kagawong	Kagawong (diesel portion).....	300	.....	1,960
Chapleau	Chapleau.....	500	336	835,200
Hornepayne	Hornepayne.....	1,000	573	3,022,400
Total diesel-electric.....		1,800	.....	3,859,560
Total generated—Northeastern Division.....		344,200	.....	1,915,633,796
<b>NORTHWESTERN DIVISION</b>				
<i>River</i>	<i>Hydro-Electric Generating Stations</i>			
Nipigon	Pine Portage.....	119,200	119,000	678,510,160
	Cameron Falls.....	76,700	75,500	462,484,000
English	Alexander.....	60,900	62,500	350,516,000
	Caribou Falls.....	79,300	79,000	464,912,000
	Manitou Falls.....	65,700	65,000	374,399,412
	Ear Falls.....	15,900	16,640	124,675,400
Kaministiquia	Silver Falls.....	45,500	46,000	6,872,600
	Kakabeka Falls.....	25,000	24,000	159,442,100
Winnipeg	Whitedog Falls.....	61,700	60,000	262,861,000
Agasabon	Agasabon.....	44,000	45,600	256,103,470
Albany	Rat Rapids.....	.....	.....	1,176,710
Total generated—Northwestern Division.....		593,900	.....	3,141,952,852
<i>Sources of Purchased Power</i>				
<b>NORTHEASTERN DIVISION</b>				
†Abitibi Power & Paper Company, Limited.....	.....	18,000	.....	14,408,240
†Quebec Hydro-Electric Commission.....	.....	36,100	.....	158,013,228
Miscellaneous (relatively small suppliers).....	1,200	1,178	.....	8,703,546
Total purchased—Northeastern Division.....		1,200	.....	181,125,014
<b>NORTHWESTERN DIVISION</b>				
Ontario-Minnesota Pulp & Paper Company.....	1,700	1,496	.....	8,300,320
Manitoba Hydro-Electric Board.....	.....	8,400	.....	125,506,285
Total purchased—Northwestern Division.....		1,700	.....	133,806,605
<b>Total generated—All systems.....</b>		<b>5,533,800</b>	.....	<b>29,600,388,956</b>
<b>Total purchased—All systems.....</b>		<b>620,900</b>	.....	<b>5,865,025,328</b>
<b>Total generated and purchased—All systems.....</b>		<b>6,154,700</b>	.....	<b>35,465,414,284</b>



POWER RESOURCES

		December dependable		
		Commission stations		
		Hydro-electric	Thermal-electric†	Total
		kw	kw	kw
Southern Ontario System.....	1959	3,979,700	616,000	4,595,700
	1958	3,722,400	616,000	4,338,400
Northern Ontario Properties				
Northeastern Division.....	1959	342,400	1,800	344,200
	1958	297,400	1,800	299,200
Total—Combined systems.....	1959	4,322,100	617,800	4,939,900
	1958	4,019,800	617,800	4,637,600
Net increase or decrease				
Southern Ontario System.....		257,300	0	257,300
Northeastern Division.....		45,000		45,000
Combined systems.....		302,300	0	302,300
Northern Ontario Properties				
Northwestern Division.....	1959	593,900	0	593,900
	1958	528,600	0	528,600
Net increase or decrease				
Northwestern Division.....		65,300	0	65,300
Total—All systems.....	1959	4,916,000	617,800	5,533,800
	1958	4,548,400	617,800	5,166,200

\* The capacities shown are those available for a 20-minute period at the times of system primary peak demand in each of the three operating systems in December, the capacity of sources of purchased power being based on the terms of the purchase contract. Requirements shown are the December coincident peaks for each system and their arithmetic sum.

ANNUAL ENERGY

Energy Made Available by the Commission

	1958		1959		Increase or decrease
	kwh		kwh		per cent
SOUTHERN ONTARIO SYSTEM					
Generated (net)					
hydro-electric . . . . .	20,360,217,153		24,206,123,608		18.9
thermal-electric . . . . .	601,391,600		336,678,700		44.0
Total generated . . . . .	20,961,608,753		24,542,802,308		17.1
Purchased . . . . .	5,624,542,003		5,550,093,709		1.3
Transferred* in or <i>out</i> (net) . . . . .	1,099,669,000		1,518,561,000		38.1
Primary . . . . .		22,633,438,156		25,226,264,417	11.4
Secondary . . . . .		2,853,043,600		3,348,070,600	17.4
Total . . . . .	25,486,481,756	25,486,481,756	28,574,335,017	28,574,335,017	12.1
NORTHERN ONTARIO PROPERTIES					
NORTHEASTERN DIVISION					
Generated (net)					
hydro-electric . . . . .	1,878,745,129		1,911,774,236		1.8
diesel-electric . . . . .	3,914,840		3,859,560		1.4
Total generated . . . . .	1,882,659,969		1,915,633,796		1.8
Purchased . . . . .	151,226,659		181,125,014		19.8
Transferred* in or <i>out</i> (net) . . . . .	1,099,669,000		1,518,561,000		38.1
Primary . . . . .		3,034,644,968		3,559,611,260	17.3
Secondary . . . . .		98,910,660		55,708,550	43.7
Total . . . . .	3,133,555,628	3,133,555,628	3,615,319,810	3,615,319,810	15.4
NORTHWESTERN DIVISION					
Generated (net)					
hydro-electric . . . . .	2,799,098,978		3,141,952,852		12.2
Purchased . . . . .	31,243,484		133,806,605		328.3
Primary . . . . .		2,713,801,843		2,760,792,799	1.7
Secondary . . . . .		116,540,619		514,966,658	341.9
Total . . . . .	2,830,342,462	2,830,342,462	3,275,759,457	3,275,759,457	15.7
ALL SYSTEMS					
Generated (net)					
hydro-electric . . . . .	25,038,061,260		29,259,850,696		16.9
thermal- and diesel-electric . . . . .	605,306,440		340,538,260		43.7
Total generated . . . . .	25,643,367,700		29,600,388,956		15.4
Purchased . . . . .	5,807,012,146		5,865,025,328		1.0
Primary . . . . .		28,381,884,967		31,546,668,476	11.2
Secondary . . . . .		3,068,494,879		3,918,745,808	27.7
Total . . . . .	31,450,379,846	31,450,379,846	35,465,414,284	35,465,414,284	12.8

\* Net interchange between Southern Ontario System and Northeastern Division of the Northern Ontario Properties.

## AND REQUIREMENTS

capacity*		Primary power requirements*	Reserve	Ratio of reserve to requirements
Sources of purchased power	Total dependable capacity*			
kw	kw	kw	kw	per cent
618,000	5,213,700	4,578,541	.....	.....
592,000	4,930,400	4,252,715	.....	.....
1,200	345,400	550,067	.....	.....
1,200	300,400	437,468	.....	.....
619,200	5,559,100	5,128,608	430,492	8.4
593,200	5,230,800	4,690,183	540,617	11.5
26,000	283,300	325,826	.....	.....
0	45,000	112,599	.....	.....
26,000	328,300	438,425	.....	.....
1,700	595,600	427,866	167,734	39.2
1,700	530,300	448,821	81,479	18.2
0	65,300	20,955	.....	.....
620,900	6,154,700	5,556,474	**	**
594,900	5,761,100	5,139,004	**	**

\*\* There is no interconnection between the Northwestern Division and the other operating systems of the Commission.  
 † Includes diesel-electric.

## ACCOUNT

## Energy Disposed of by the Commission in Wholesale Quantities

	1958	1959	Increase or decrease
	kwh	kwh	per cent
<b>SOUTHERN ONTARIO SYSTEM</b>			
Primary—Municipal electrical utilities.....	13,976,502,536	15,980,829,118	14.3
—Local systems.....	4,268,080	4,616,784	8.2
—Interconnected systems, for resale.....	409,054,841	411,698,482	0.6
—Rural operating areas.....	2,185,504,319	2,310,451,148	5.7
—Direct industrial customers.....	4,145,112,482	4,118,441,003	0.6
Total primary.....	20,720,442,258	22,826,036,535	10.2
Secondary—Interconnected systems, for resale.....	2,701,329,000	3,168,785,000	17.3
—Direct industrial customers.....	32,052,900	4,942,800	84.6
Total secondary.....	2,733,381,900	3,173,727,800	16.1
Total primary and secondary.....	23,453,824,158	25,999,764,335	10.9
Losses and unaccounted for.....	2,032,657,598	2,574,570,682	26.7
Total.....	25,486,481,756	28,574,335,017	12.1
<b>NORTHERN ONTARIO PROPERTIES</b>			
<b>NORTHEASTERN DIVISION</b>			
Primary—Municipal electrical utilities.....	286,561,147	301,070,237	5.1
—Local systems.....	161,480,128	172,927,485	7.1
—Interconnected systems, for resale.....	13,936,200	15,485,020	11.1
—Rural operating areas.....	229,023,868	272,253,723	18.9
—Direct industrial customers.....	2,001,232,673	2,404,891,793	20.2
Total primary.....	2,692,234,016	3,166,628,258	17.6
Secondary—Interconnected systems, for resale.....	.....	36,337	.....
—Direct industrial customers.....	96,123,307	65,024,760	32.4
Total secondary.....	96,123,307	65,061,097	32.3
Total primary and secondary.....	2,788,357,323	3,231,689,355	15.9
Losses and unaccounted for.....	345,198,305	383,630,455	11.1
Total.....	3,133,555,628	3,615,319,810	15.4
<b>NORTHWESTERN DIVISION</b>			
Primary—Municipal electrical utilities.....	443,819,260	473,203,775	6.6
—Local systems.....	16,369,460	18,082,895	10.5
—Interconnected systems, for resale.....	.....	.....	.....
—Rural operating areas.....	68,167,879	72,200,621	5.9
—Direct industrial customers.....	1,971,552,080	2,016,322,235	2.3
Total primary.....	2,499,908,679	2,579,809,526	3.2
Secondary—Interconnected systems, for resale.....	36,208,938	189,147,313	.....
—Direct industrial customers.....	70,077,354	290,671,340	.....
Total secondary.....	106,286,292	479,818,653	.....
Total primary and secondary.....	2,606,194,971	3,059,628,179	17.4
Losses and unaccounted for.....	224,147,491	216,131,278	3.6
Total.....	2,830,342,462	3,275,759,457	15.7
<b>ALL SYSTEMS</b>			
Primary.....	25,912,584,953	28,572,474,319	10.3
Secondary.....	2,935,791,499	3,718,607,550	26.7
Losses and unaccounted for.....	2,602,003,394	3,174,332,415	22.0
Total.....	31,450,379,846	35,465,414,284	12.8

ANALYSIS OF  
by the Commission and Associated

	Sales by utilities listed in Statement A	Sales by The
		Through local systems
	kwh	kwh
Classes of ultimate customers served:		
Domestic.....	6,428,108,270	112,861,021
Hamlet and rural residential.....		
Summer.....		
Total sales domestic-type service.....	6,428,108,270	112,861,021
Commercial.....	2,620,476,254	48,850,972
Power—primary.....	7,032,685,954	19,466,080
—secondary.....		
Farm.....		
Street lighting.....	237,332,608	2,610,920
Total sales to ultimate customers served.....	16,318,603,086	183,788,993
Delivered to interconnected systems for resale:		
Primary.....		
Secondary.....		
Total sales to ultimate customers and for resale.....	16,318,603,086	183,788,993
Adjustments:		
Losses and unaccounted for—municipal utilities.....	838,725,546	
Generated by utilities listed in Statement A.....	211,384,483	
Purchased by utilities listed in Statement A from sources other than the Commission.....	190,841,019	
Commission sales, wholesale and retail.....	16,755,103,130	183,788,993
Adjustment for losses and unaccounted for—Commission...		11,838,171
*Disposed of by the Commission in wholesale quantities.....	16,755,103,130	195,627,164

\* This line gives the sums of the corresponding items shown on the preceding page for each of the three operating systems. The total of 32,291,081,869 kilowatt-hours plus transmission losses and unaccounted for amounting to 3,174,322,415 kilowatt-hours equals the 35,465,414,284 kilowatt-hours shown as generated and purchased.



## ENERGY SALES

## Municipal Electrical Utilities during 1959

Hydro-Electric Power Commission of Ontario			
In rural areas	To direct industrial customers	To interconnected systems for resale	Total
kwh	kwh	kwh	kwh
.....	.....	.....	6,540,969,291
988,315,209	.....	.....	988,315,209
60,345,721	.....	.....	60,345,721
1,048,660,930	.....	.....	7,589,630,221
282,562,584	.....	.....	2,951,889,810
287,458,107	8,539,655,031	.....	15,879,265,172
.....	360,638,900	.....	360,638,900
804,044,121	.....	.....	804,044,121
11,340,848	.....	.....	251,284,376
2,434,066,590	8,900,293,931	.....	27,836,752,600
.....	.....	427,183,502	427,183,502
.....	.....	3,357,968,650	3,357,968,650
2,434,066,590	8,900,293,931	3,785,152,152	31,621,904,752
.....	.....	.....	838,725,546
.....	.....	.....	211,384,483
.....	.....	.....	190,841,019
2,434,066,590	8,900,293,931	3,785,152,152	32,058,404,796
220,838,902	.....	.....	232,677,073
2,654,905,492	8,900,293,931	3,785,152,152	32,291,081,869

## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM		cycles	kw	'000 kwh	per cent
Acton.....	Jan. 1913	60	3,727.2	16,784	11.2
Ailsa Craig.....	Jan. 1916	60	330.6	1,195	22.7
Ajax.....	Jan. 1952	60	5,354.0	26,123	5.7
Alexandria.....	Jan. 1921	60	1,786.0	7,275	14.6
Alfred.....	June 1952	60	417.0	1,421	34.2
Alliston.....	June 1918	60	1,877.0	8,779	10.7
Almonte.....	Feb. 1945	60	1,502.7	5,294	7.2
Alvinston.....	Apr. 1922	60	267.7	886	7.0
Amherstburg.....	Feb. 1919	60	3,108.4	16,354	4.7
Ancaster Twp.....	Jan. 1914	60	2,436.4	9,532	8.1
Apple Hill.....	Apr. 1921	60	102.3	390	11.3
Arkona.....	Dec. 1926	60	332.6	1,248	14.1
Arnprior.....	June 1929	60	4,152.0	18,179	8.4
Arthur.....	Dec. 1916	60	763.3	2,881	9.0
Athens.....	Jan. 1929	60	443.7	1,706	12.8
Aurora.....	Dec. 1920	60	4,841.6	21,879	32.5
Avonmore.....	Oct. 1959	60	168.9	162	.....
Aylmer.....	Mar. 1918	60	4,466.9	18,691	11.1
Ayr.....	Jan. 1915	60	767.6	2,650	10.7
Baden.....	May 1912	60	855.1	3,172	11.9
†Bala.....	Apr. 1929	60	291.8	1,829	2.8
Bancroft.....	Mar. 1950	60	1,267.2	4,927	1.5
Barrie.....	Apr. 1913	60	16,601.2	79,008	9.3
Barry's Bay.....	Jan. 1950	60	399.8	1,416	20.4
Bath.....	Nov. 1931	60	347.8	1,252	9.7
Beachville.....	Aug. 1912	60	2,401.2	15,875	8.1
Beamsville.....	Jan. 1930	60	1,597.2	6,577	.....
Beaverton.....	Nov. 1914	60	1,009.9	4,619	10.7
Beeton.....	Aug. 1918	60	487.2	1,818	10.3
Belle River.....	Dec. 1922	60	653.6	2,788	5.1
Belleville.....	Mar. 1916	60	23,125.7	107,673	32.3
Blenheim.....	Nov. 1915	60	1,481.7	6,042	10.4
Bloomfield.....	Apr. 1919	60	434.4	1,626	1.9
Blyth.....	July 1924	60	688.0	2,597	6.1
Bobcaygeon.....	July 1946	60	689.6	3,014	10.0
Bolton.....	Feb. 1915	60	1,206.0	4,477	22.5
Bothwell.....	Sep. 1915	60	419.1	1,350	7.1
Bowmanville.....	Mar. 1916	60	6,229.3	27,265	9.0
Bracebridge.....	June 1955	60	.....	14	52.7
Bradford.....	Oct. 1918	60	1,693.8	7,954	17.2
Braeside.....	June 1929	60	1,449.1	3,176	156.4
Brampton.....	Nov. 1911	60	11,940.0	47,591	14.4
Brantford.....	Feb. 1914	60	43,963.2	213,438	8.3
Brantford Twp.....	Oct. 1915	60	4,867.2	23,350	14.6
Brechin.....	Jan. 1915	60	133.2	491	3.8

†Local system

TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Bridgeport . . . . .	Mar. 1928	60	882.4	3,270	12.5
Brigden . . . . .	Jan. 1918	60	252.8	872	4.9
Brighton . . . . .	Mar. 1916	60	1,399.8	5,946	6.4
Brockville . . . . .	Apr. 1915	60	16,135.0	72,859	6.3
Brussels . . . . .	July 1924	60	658.4	2,543	11.9
Burford . . . . .	June 1915	60	829.8	3,024	8.3
Burgessville . . . . .	Nov. 1916	60	184.0	615	8.0
Burk's Falls . . . . .	Jan. 1950	60	449.1	1,838	11.9
Burlington . . . . .	Jan. 1930	60	32,334.2	130,408	*
Caledonia . . . . .	Oct. 1912	60	1,106.6	4,387	3.9
Campbellford . . . . .	July 1959	60	824.5	159	....
Campbellville . . . . .	Jan. 1925	60	175.0	652	12.3
Cannington . . . . .	Nov. 1914	60	691.2	2,596	10.0
Cardinal . . . . .	July 1930	60	973.6	4,158	2.2
Carleton Place . . . . .	May 1919	60	3,024.2	14,908	6.3
Casselman . . . . .	Dec. 1952	60	603.4	2,248	6.8
Cayuga . . . . .	Nov. 1924	60	462.9	1,659	8.9
Chalk River . . . . .	Jan. 1957	60	462.5	1,981	11.8
Chatham . . . . .	Feb. 1915	60	19,286.1	89,750	22.7
Chatsworth . . . . .	Dec. 1915	60	287.2	1,041	5.5
Chesley . . . . .	July 1916	60	1,173.7	4,502	3.4
Chesterville . . . . .	Apr. 1914	60	1,262.8	5,379	7.6
Chippawa . . . . .	Sep. 1919	60	1,305.8	5,189	14.6
Clifford . . . . .	May 1924	60	369.9	1,555	5.3
Clinton . . . . .	Mar. 1914	60	2,179.1	9,673	4.8
Cobden . . . . .	Dec. 1934	60	605.8	2,324	8.3
Cobourg . . . . .	Mar. 1916	60	9,038.1	40,983	8.9
Colborne . . . . .	Mar. 1916	60	917.3	3,661	4.3
Coldwater . . . . .	Mar. 1913	60	575.4	2,243	15.2
Collingwood . . . . .	Mar. 1913	60	6,142.3	26,873	4.5
Comber . . . . .	May 1915	60	307.2	1,026	6.0
Cookstown . . . . .	May 1918	60	329.4	1,304	9.6
Cottam . . . . .	Feb. 1919	60	266.7	945	8.5
Courtright . . . . .	Dec. 1923	60	184.0	671	3.4
Creemore . . . . .	Nov. 1914	60	496.8	1,966	4.0
Dashwood . . . . .	Sep. 1917	60	252.9	934	9.5
Deep River . . . . .	Aug. 1958	60	3,485.4	14,968	....
Delaware . . . . .	Mar. 1915	60	250.4	903	5.9
Delhi . . . . .	May 1938	60	2,694.1	10,191	6.3
Deseronto . . . . .	Mar. 1916	60	906.2	4,454	4.3
Dorchester . . . . .	Dec. 1914	60	407.0	1,501	8.1
Drayton . . . . .	Mar. 1918	60	424.0	1,286	9.2
Dresden . . . . .	Apr. 1915	60	1,254.0	5,506	15.1
Drumbo . . . . .	Dec. 1914	60	281.2	872	10.0
Dublin . . . . .	Oct. 1917	60	234.2	812	5.5

\* A large rural subdivision was annexed by the municipality in November 1958.



## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Dundalk . . . . .	Dec. 1915	60	575.9	2,080	12.2
Dundas . . . . .	Jan. 1911	60	7,596.5	31,288	8.2
Dunnville . . . . .	June 1918	60	3,521.8	15,623	2.2
Durham . . . . .	Dec. 1915	60	1,457.5	6,019	5.6
Dutton . . . . .	Sep. 1915	60	415.2	1,584	4.5
East York Twp. . . . .	Dec. 1923	60	38,224.0	180,963	3.1
Eganville . . . . .	Apr. 1952	60	578.8	2,202	16.6
Elmira . . . . .	Nov. 1913	60	3,635.8	14,909	7.5
Elmvale . . . . .	June 1913	60	622.0	2,470	7.4
Elmwood . . . . .	Apr. 1918	60	217.0	569	9.0
Elora . . . . .	Nov. 1914	60	789.2	3,301	9.2
Embro . . . . .	Jan. 1915	60	383.7	1,510	7.7
Erieau . . . . .	July 1924	60	331.5	1,518	2.0
Erie Beach . . . . .	July 1925	60	59.1	184	7.4
Erin . . . . .	Jan. 1945	60	615.5	2,315	12.9
Essex . . . . .	Feb. 1919	60	1,617.1	6,800	1.8
Etobicoke Twp. . . . .	Aug. 1917	60	112,719.8	548,410	9.9
Exeter . . . . .	June 1916	60	2,187.2	8,963	10.8
Fergus . . . . .	Nov. 1914	60	3,510.3	13,913	8.8
Finch . . . . .	Feb. 1928	60	293.7	1,002	12.0
Flesherton . . . . .	Dec. 1915	60	416.4	1,338	15.3
Fonthill . . . . .	June 1926	60	1,329.6	4,987	1.8
Forest . . . . .	Mar. 1917	60	1,290.8	6,674	7.3
Forest Hill . . . . .	Jan. 1938	60	13,801.0	67,377	3.6
Frankford . . . . .	Oct. 1937	60	765.3	2,759	10.7
Galt . . . . .	May 1911	60	23,305.5	105,159	17.6
Georgetown . . . . .	Sep. 1913	60	7,754.3	33,925	12.9
Glencoe . . . . .	Aug. 1920	60	599.7	2,421	13.2
Goderich . . . . .	Feb. 1914	60	5,371.6	23,837	15.7
Grand Bend . . . . .	July 1954	60	564.7	3,003	12.4
Grand Valley . . . . .	Dec. 1916	60	456.2	1,685	9.2
Granton . . . . .	July 1916	60	134.5	442	13.1
Gravenhurst . . . . .	Nov. 1915	60	2,492.2	12,190	3.3
Grimsby . . . . .	Jan. 1930	60	2,992.5	12,968	5.9
Guelph . . . . .	Dec. 1910	60	35,645.5	162,662	20.5
Hagersville . . . . .	Sep. 1913	60	1,726.7	6,900	4.1
Hamilton . . . . .	Feb. 1911	25 & 60	324,641.3	1,849,882	21.6
Hanover . . . . .	Sep. 1916	60	3,815.6	14,913	7.9
Harriston . . . . .	July 1916	60	1,354.2	5,789	8.0
Harrow . . . . .	Feb. 1919	60	1,375.4	5,701	7.5
Hastings . . . . .	June 1931	60	460.8	1,886	11.8
Havelock . . . . .	Feb. 1921	60	577.2	2,360	23.9
Hawkesbury . . . . .	June 1952	60	3,025.3	13,792	12.7
Hensall . . . . .	Jan. 1917	60	781.5	3,468	10.5
†Hepworth . . . . .	Apr. 1930	60	131.6	490	8.6

† Local system

TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Hespeler .....	Feb. 1911	60	5,071.2	23,356	11.7
Highgate .....	Dec. 1916	60	222.0	625	9.0
Holstein .....	May 1916	60	118.8	400	4.8
Huntsville .....	Sep. 1916	60	2,577.1	13,425	4.0
Ingersoll .....	May 1911	60	5,582.1	25,100	13.2
Iroquois .....	Feb. 1940	60	844.8	3,340	1.8
Jarvis .....	Feb. 1924	60	394.2	1,478	3.4
Kemptville .....	Dec. 1921	60	1,512.9	6,592	7.7
Kincardine .....	Mar. 1921	60	2,112.9	9,803	6.8
Kingston .....	Dec. 1917	60	40,130.7	200,692	6.3
Kingsville .....	Feb. 1919	60	2,178.9	8,165	4.5
Kirkfield .....	June 1920	60	83.6	322	9.2
Kitchener .....	Jan. 1911	60	64,996.0	324,222	10.9
Lakefield .....	Aug. 1920	60	1,310.4	5,194	4.1
Lambeth .....	Apr. 1915	60	1,045.6	3,361	7.2
Lanark .....	Sep. 1921	60	300.3	1,201	0.5
Lancaster .....	May 1921	60	309.6	1,097	4.5
Leamington .....	Feb. 1919	60	6,073.8	28,630	8.9
Lindsay .....	Mar. 1916	60	8,026.4	40,651	9.2
Listowel .....	June 1916	60	3,006.0	12,900	6.1
London .....	Jan. 1911	60	66,945.0	368,851	5.6
London Twp. ....	Sep. 1917	60	1,822.0	6,606	6.2
Long Branch .....	Jan. 1931	60	7,291.0	32,017	3.4
L'Orignal .....	June 1952	60	382.6	1,385	11.6
Lucan .....	Feb. 1915	60	677.3	2,364	5.1
Lucknow .....	Jan. 1921	60	745.0	2,948	16.1
Lynden .....	Nov. 1915	60	321.7	1,185	10.8
Madoc .....	Mar. 1916	60	994.4	3,745	6.3
Magnetawan .....	July 1951	60	79.7	307	4.1
Markdale .....	Mar. 1916	60	709.6	2,768	13.8
Markham .....	Apr. 1920	60	3,077.7	11,155	14.8
Marmora .....	Jan. 1921	60	799.5	3,222	4.9
Martintown .....	May 1921	60	180.0	549	6.1
Maxville .....	Feb. 1921	60	450.7	1,634	5.2
Meaford .....	Jan. 1924	69	2,621.6	12,701	12.1
Merlin .....	Dec. 1922	60	306.1	1,178	8.0
Merrickville .....	July 1950	60	443.7	1,943	8.2
Merrittville .....	Nov. 1920	60	18,718.0	103,813	20.1
Midland .....	July 1911	60	7,567.3	34,300	6.7
Mildmay .....	Apr. 1930	60	599.0	1,988	11.1
Millbrook .....	Mar. 1916	60	486.4	1,770	8.8
Milton .....	Apr. 1913	60	4,738.0	20,719	7.7
Milverton .....	June 1916	60	923.1	3,220	8.0
Mimico .....	May 1912	60	8,851.0	41,709	8.0
Mitchell .....	Sep. 1911	60	1,918.4	7,834	2.7

## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Moorefield.....	Mar. 1918	60	228.6	742	7.1
Morrisburg.....	June 1938	60	1,440.1	5,876	3.3
Mount Brydges.....	Mar. 1915	60	338.2	1,372	5.2
Mount Forest.....	Dec. 1915	60	1,980.4	7,529	11.7
Napanee.....	Mar. 1916	60	3,294.8	15,298	2.7
Neustadt.....	Dec. 1918	60	270.4	969	6.1
Newboro.....	Dec. 1948	60	98.8	356	8.1
Newburgh.....	Mar. 1916	60	260.6	1,022	5.6
Newbury.....	Mar. 1921	60	115.6	427	7.0
Newcastle.....	Mar. 1916	60	858.5	3,761	8.0
New Hamburg.....	Mar. 1911	60	1,377.3	5,622	5.7
Newmarket.....	Dec. 1920	60	6,312.0	27,540	6.6
New Toronto.....	Feb. 1914	60	27,187.2	157,406	23.9
Niagara.....	Aug. 1919	60	1,858.6	8,604	1.0
Niagara Falls.....	Dec. 1915	60	17,213.5	86,783	3.8
North York Twp.....	Nov. 1923	60	170,847.3	755,466	13.9
Norwich.....	May 1912	60	1,045.0	4,320	6.2
Norwood.....	Feb. 1921	60	579.8	2,461	10.2
Oakville.....	Jan. 1930	60	9,786.0	45,801	9.7
Oil Springs.....	Feb. 1918	60	263.5	1,249	5.1
Omeme.....	Jan. 1918	60	435.2	1,748	8.7
Orangeville.....	July 1916	60	3,241.8	13,651	13.6
Orillia.....	Jan. 1954	60	5,196.2	16,290	6.3
Orono.....	Mar. 1916	60	492.1	1,969	16.7
Oshawa.....	Mar. 1916	60	64,727.0	308,758	6.6
Ottawa.....	Jan. 1914	60	175,473.5	741,508	11.8
Otterville.....	Feb. 1916	60	415.6	1,471	1.0
Owen Sound.....	Dec. 1915	60	11,750.6	54,963	7.1
Paisley.....	Sep. 1923	60	453.5	1,956	12.7
Palmerston.....	July 1916	60	1,170.6	5,014	0.2
Paris.....	Feb. 1914	60	3,585.1	15,669	6.8
Parkhill.....	May 1920	60	835.6	3,323	14.4
Parry Sound.....	Aug. 1946	60	1,944.7	8,586	5.3
Penetanguishene.....	July 1911	60	2,696.9	12,776	8.5
Perth.....	Feb. 1919	60	3,872.4	16,856	11.1
Peterborough.....	Mar. 1913	60	37,898.9	199,189	4.6
Petrolia.....	May 1916	60	1,692.8	7,587	6.2
Pickering.....	July 1958	60	859.8	3,705	*
Picton.....	Apr. 1919	60	3,890.3	17,151	4.7
Plattsville.....	Dec. 1914	60	644.5	2,608	6.2
Point Edward.....	Nov. 1916	60	4,306.2	17,236	34.3
Port Burwell.....	Aug. 1955	60	230.3	932	6.9
†Port Carling.....	Apr. 1929	60	368.0	2,298	12.8
Port Colborne.....	Mar. 1920	60	6,926.4	29,523	9.3
Port Credit.....	Aug. 1912	60	9,922.5	64,340	5.1

† Local system

\* Operated only for six months in 1958



TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Port Dalhousie.....	Nov. 1912	60	1,566.0	8,362	0.1
Port Dover.....	Dec. 1921	60	1,885.9	9,579	9.7
Port Elgin.....	Apr. 1930	60	1,058.6	5,307	4.7
Port Hope.....	Mar. 1916	60	7,949.2	39,310	6.9
Port McNicoll.....	Jan. 1915	60	1,420.9	3,224	3.6
Port Perry.....	Sep. 1922	60	1,357.0	5,424	8.5
Port Rowan.....	Nov. 1926	60	368.0	1,074	4.0
Port Stanley.....	Apr. 1912	60	1,003.5	5,113	0.5
Prescott.....	Dec. 1913	60	3,518.7	15,673	5.5
Preston.....	Jan. 1911	60	9,043.6	41,218	8.2
Priceville.....	Mar. 1921	60	41.4	178	12.2
Princeton.....	Jan. 1915	60	298.4	994	5.1
Queenston.....	Mar. 1921	60	345.7	1,561	6.0
Renfrew.....	Dec. 1944	60	3,602.0	14,189	15.2
Richmond.....	Aug. 1928	60	564.0	2,102	15.6
Richmond Hill.....	June 1925	60	9,495.9	36,940	14.1
Ridgetown.....	Dec. 1915	60	1,346.2	5,403	7.5
Ripley.....	Jan. 1921	60	314.2	1,210	10.7
Riverside.....	Nov. 1922	60	6,832.0	25,950	12.7
Rockland.....	Apr. 1954	60	1,117.1	3,928	16.2
Rockwood.....	Sep. 1913	60	435.4	1,770	7.9
Rodney.....	Feb. 1917	60	448.0	1,844	5.8
Rosseau.....	July 1931	60	80.3	366	16.6
Russell.....	Feb. 1926	60	292.4	1,155	8.8
St. Catharines.....	Apr. 1914	60	43,041.7	209,441	2.9
St. Clair Beach.....	Nov. 1922	60	624.0	2,456	8.3
St. George.....	Sep. 1915	60	522.2	2,003	12.1
St. Jacobs.....	Sep. 1917	60	445.3	1,755	4.6
St. Mary's.....	May 1911	60	10,523.5	66,930	29.9
St. Thomas.....	Apr. 1911	60	14,941.4	75,279	7.0
Sandwich East Twp....	Oct. 1956	60	6,176.6	28,349	11.5
Sandwich West Twp....	Mar. 1956	60	11,968.1	48,267	10.7
Sarnia.....	Dec. 1916	60	119,580.8	842,217	*
Scarborough Twp.....	Aug. 1918	60	139,804.8	587,138	10.5
Seaforth.....	Nov. 1911	60	1,688.6	7,011	4.8
Shelburne.....	July 1916	60	853.0	3,450	7.8
Simcoe.....	Apr. 1915	60	7,652.8	35,893	7.0
Smith's Falls.....	Sep. 1918	60	7,642.2	31,671	7.9
Smithville.....	Jan. 1930	60	603.0	2,174	15.6
Southampton.....	Apr. 1930	60	931.0	5,256	6.5
Springfield.....	Aug. 1917	60	237.8	964	11.6
Stamford Twp.....	Nov. 1916	60	17,640.0	80,110	10.7
Stayner.....	Oct. 1913	60	1,161.1	4,039	0.6
Stirling.....	Mar. 1916	60	892.0	3,526	7.2
Stoney Creek.....	Jan. 1930	60	4,042.3	15,887	3.0

\* An industrial customer formerly served by the Commission was taken over by the municipality in the month of January 1959.

## POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM—Continued		cycles	kw	'000 kwh	per cent
Stouffville .....	Sep. 1923	60	2,130.5	7,612	10.3
Stratford .....	Jan. 1911	60	15,608.2	74,283	2.9
Strathroy .....	Dec. 1914	60	3,383.4	16,187	2.5
Streetsville .....	Dec. 1934	60	3,156.0	13,028	12.8
Sunderland .....	Nov. 1914	60	446.0	1,594	9.6
Sundridge .....	June 1952	60	340.6	1,378	15.3
Sutton .....	Aug. 1923	60	901.2	4,463	1.0
Swansea .....	Oct. 1923	60	6,474.0	31,894	9.6
Tara .....	Oct. 1937	60	404.7	1,552	22.3
Tavistock .....	Feb. 1918	60	883.8	3,591	3.9
Tecumseh .....	Nov. 1922	60	1,436.6	5,708	5.5
Teeswater .....	Dec. 1920	60	623.2	2,764	10.2
Thamesford .....	Feb. 1914	60	717.6	2,805	27.6
Thamesville .....	Oct. 1915	60	591.6	2,572	8.3
Thedford .....	May 1922	60	435.6	1,773	10.8
Thornbury .....	Sep. 1944	60	715.7	2,822	22.2
Thorndale .....	Mar. 1914	60	266.6	876	9.7
Thornton .....	Nov. 1918	60	135.7	435	2.4
Thorold .....	Jan. 1921	60	11,254.1	66,945	10.9
Tilbury .....	Apr. 1915	60	1,211.9	5,026	5.5
Tillsonburg .....	Aug. 1911	60	5,385.1	20,653	7.1
Toronto .....	June 1911	60	578,825.0	3,275,425	4.2
Toronto Twp. ....	Aug. 1913	60	49,766.1	297,699	3.2
Tottenham .....	Oct. 1918	60	453.8	1,746	11.0
Trafalgar Twp. ....	Dec. 1923	60	20,276.8	107,284	73.9
Trenton .....	Mar. 1916	60	15,922.4	86,225	6.2
Tweed .....	Mar. 1916	60	1,135.2	4,422	7.2
Uxbridge .....	Sep. 1922	60	1,498.4	6,989	12.0
Vankleek Hill .....	June 1952	60	595.8	2,248	12.6
Victoria Harbour .....	July 1914	60	330.2	1,408	15.6
Walkerton .....	Apr. 1930	60	2,879.7	10,321	8.8
Wallaceburg .....	Feb. 1915	60	7,670.0	44,111	4.6
Wardsville .....	June 1921	60	201.6	731	18.1
Warkworth .....	Oct. 1923	60	292.4	993	15.8
Wasaga Beach .....	Jan. 1953	60	233.4	2,374	8.8
Waterdown .....	Nov. 1911	60	1,140.5	4,558	4.9
Waterford .....	Apr. 1915	60	1,094.6	3,940	6.8
Waterloo .....	Dec. 1910	60	15,604.8	75,085	10.1
Watford .....	Sep. 1917	60	1,210.8	4,825	17.3
Waubauskene .....	Dec. 1914	60	274.0	1,247	5.3
Welland .....	Sep. 1917	60	14,194.6	68,056	10.9
Wellesley .....	Nov. 1916	60	439.8	1,544	8.9
Wellington .....	Apr. 1919	60	585.2	2,402	5.4
West Lorne .....	Jan. 1917	60	916.9	3,683	0.9
Weston .....	Aug. 1911	60	9,029.8	44,918	8.3

TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

Municipality	Date of first delivery	Frequency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
SOUTHERN ONTARIO SYSTEM—Concluded		cycles	kw	'000 kwh	per cent
Westport.....	Nov. 1931	60	399.2	1,547	9.6
Wheatley.....	Feb. 1924	60	808.2	3,291	5.3
Whitby.....	Mar. 1916	60	11,026.8	52,401	13.9
Warton.....	Apr. 1930	60	1,315.9	5,940	11.6
Williamsburg.....	Apr. 1915	60	239.6	878	0.5
Winchester.....	Jan. 1914	60	1,062.4	5,219	12.2
Windermere.....	June 1930	60	59.5	490	8.5
Windsor.....	Oct. 1914	60	77,946.9	383,462	5.1
Wingham.....	Dec. 1920	60	2,276.2	9,808	6.7
Woodbridge.....	Dec. 1914	60	2,173.8	8,904	3.5
Woodstock.....	Jan. 1911	60	17,598.0	92,677	9.7
Woodville.....	Nov. 1914	60	218.0	806	6.4
Wyoming.....	Nov. 1916	60	353.9	1,415	7.4
York Twp.....	Jan. 1913	60	66,200.0	327,266	4.3
Zurich.....	Sep. 1917	60	399.0	1,452	9.8
NORTHERN ONTARIO PROPERTIES					
Atikokan Twp.....	Dec. 1944	60	3,715.0	21,398	23.2
†Beardmore.....	June 1937	60	420.6	1,829	1.5
†Blind River.....	Nov. 1954	60	2,023.5	9,377	6.9
Cache Bay.....	Dec. 1950	60	276.3	1,453	50.5
Capreol.....	May 1935	60	1,914.0	7,456	4.9
Chapleau Twp.....	Aug. 1955	60	334.0	834	15.4
†Cobalt.....	Jan. 1945	60	1,053.3	4,740	7.8
Cochrane.....	Dec. 1952	60	2,766.6	13,387	5.9
Coniston.....	Sep. 1956	60	1,060.9	4,147	14.8
Dryden.....	Feb. 1954	60	2,693.6	13,867	5.9
†Elk Lake Townsite....	Jan. 1945	60	395.9	1,348	17.3
†Englehart.....	Jan. 1945	60	1,018.3	4,190	8.3
Fort William.....	Oct. 1926	60	35,072.0	204,216	5.1
†Geraldton.....	Feb. 1937	60	1,407.4	6,168	2.1
†Gogama.....	Aug. 1956	60	196.5	819	25.5
†Haileybury.....	Jan. 1945	60	1,549.2	6,972	3.8
Hearst.....	Apr. 1952	60	1,103.5	4,844	4.8
†Hornepayne.....	Feb. 1955	60	573.4	2,983	2.4
†Hudson Townsite....	Oct. 1939	60	261.4	957	28.1
†Ignace.....	Dec. 1954	60	.....	597	*
†Jellicoe Townsite....	Dec. 1951	60	47.8	271	9.3
Kapuskasing.....	Aug. 1953	60	3,937.6	16,143	2.8
†Kearns Townsite....	Dec. 1938	60	318.0	1,270	16.0
†King Kirkland Townsite	Dec. 1936	60	250.0	1,056	112.5
†Kirkland Lake.....	Jan. 1945	60	9,853.4	40,434	17.2

† Local system

\* Transferred to Rural Operating Area August 1, 1959.



**POWER AND ENERGY SUPPLIED IN WHOLESALE QUANTITIES  
TO MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS**

Municipality	Date of first delivery	Fre- quency December 1959	Peak load December 1959	Energy supplied during 1959	Increase or decrease in energy consumption 1959 over 1958
<b>NORTHERN ONTARIO PROPERTIES —Concluded</b>					
		cycles	kw	'000 kwh	per cent
Larder Lake Twp.....	Mar. 1949	60	923.3	3,974	10.9
Latchford .....	Apr. 1950	60	130.1	553	5.1
Massey .....	Dec. 1952	60	488.5	1,941	27.2
†Matachewan Twp.....	Apr. 1935	60	295.3	1,162	2.7
†Matheson .....	Dec. 1935	60	551.0	2,404	3.7
†Mattawa .....	Jan. 1953	60	1,352.8	5,975	1.0
McGarry .....	Mar. 1949	60	1,047.9	4,033	3.8
†New Liskeard.....	Jan. 1945	60	3,344.0	15,742	3.8
Nipigon Twp.....	Jan. 1925	60	1,663.6	8,152	7.9
North Bay .....	Mar. 1916	60	15,976.7	73,064	4.0
†Pickle Lake Landing Townsite .....	Aug. 1952	60	118.0	449	23.3
Port Arthur .....	Dec. 1910	60	42,591.4	198,069	6.4
†Powassan .....	Mar. 1916	60	635.0	2,315	6.5
Rainy River .....	Jan. 1958	60	484.4	2,160	71.9
†Red Lake Townsite....	June 1938	60	1,553.9	5,867	8.3
Red Rock .....	Feb. 1948	60	887.8	4,111	5.4
Schreiber Twp.....	Nov. 1948	60	1,309.1	5,652	6.6
Sioux Lookout .....	Sep. 1939	60	1,673.5	8,473	5.6
†South Porcupine Townsite .....	Jan. 1945	60	2,442.3	9,362	2.9
Sturgeon Falls .....	Apr. 1951	60	2,479.1	10,312	9.1
Sudbury .....	Feb. 1930	60	28,921.3	140,262	3.9
Terrace Bay .....	Jan. 1948	60	1,417.4	7,106	2.4
Thessalon .....	May 1956	60	755.3	3,334	11.3
†Thornloe .....	Jan. 1945	60	40.2	182	1.7
†Timmins .....	Jan. 1945	60	15,321.5	62,647	3.0
Webbwood .....	Dec. 1952	60	163.5	600	3.1
West Ferris Twp.....	Apr. 1954	60	3,393.2	14,732	16.4
†White River .....	Apr. 1958	60	322.6	1,945	....

† Local system

# APPENDIX II—FINANCIAL

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## SOUTHERN ONTARIO

## FIXED

## Statement Showing Changes during

Property	In		
	Balance January 1, 1959	Changes	
		Placed in service	Equipment relocated and reclassified
	\$	\$	\$
<b>Power System</b>			
<b>HYDRO-ELECTRIC GENERATING STATIONS</b>			
Niagara River			
Sir Adam Beck-Niagara No. 1.....	83,876,038	44,776	.....
Sir Adam Beck-Niagara No. 2.....	311,473,094	377,101	.....
Ontario Power.....	21,889,392	85,676	.....
Toronto Power.....	11,483,429	63,451	.....
Welland Canal			
DeCew Falls.....	27,441,600	15,810	.....
St. Lawrence River			
St. Lawrence Power Project.....	131,232,426	151,080,420	1,152,973
Ottawa River			
Des Joachims.....	73,185,364	63,713	.....
Otto Holden.....	57,982,097	20,207	.....
Chenault.....	29,353,295	858	.....
Chats Falls.....	9,264,593	54,175	.....
Ogoki Diversion.....	5,051,394	1,561	.....
Madawaska River			
Stewartville.....	12,450,825	.....	.....
Barrett Chute.....	4,884,396	1,149	.....
Other properties.....	21,599,666	46,093	448,094
	801,167,609	151,100,788	1,601,067
<b>THERMAL-ELECTRIC GENERATING STATIONS</b>			
J. Clark Keith—Windsor.....	46,454,316	1,275	14,642
Richard L. Hearn—Toronto.....	47,873,634	101,229	.....
Lakeview—Toronto.....	.....	.....	.....
Other properties.....	415,803	72,617	.....
	94,743,753	175,121	14,642
Total generating stations.....	895,911,362	151,275,909	1,615,709
<b>TRANSFORMER STATIONS</b>			
230-kv.....	83,892,897	8,438,612	3,310,020
Other—Niagara Division.....	102,315,449	6,349,840	2,140,465
—Georgian Bay Division.....	7,477,350	122,138	32,301
—Eastern Ontario Division.....	22,017,628	2,791,748	305,842
Total transformer stations.....	215,703,324	17,702,338	1,507,698
<b>TRANSMISSION LINES</b>			
230-kv.....	93,734,966	5,710,745	1,525,141
Other—Niagara Division.....	61,305,425	3,946,524	63,051
—Georgian Bay Division.....	8,107,299	497,312	4,862
—Eastern Ontario Division.....	25,902,818	602,980	1,485,071
Total transmission lines.....	189,050,508	10,757,561	107,983



SYSTEM

ASSETS

Year 1959 and Balances at December 31, 1959

service				
during year				
Sales and retirements	Balance December 31, 1959	Under construction December 31, 1959	Total fixed assets December 31, 1959	Expenditures during 1959
\$	\$	\$	\$	\$
24,600	83,896,214	800,896	84,697,110	660,546
11,330	311,084,663	116,679	311,201,342	957,659
.....	21,975,068	9,560	21,984,628	95,236
.....	11,546,880	.....	11,546,880	27,740
31,520	27,425,890	4,111	27,430,001	18,773
.....	281,159,873	3,316,921	284,476,794	25,935,450
.....	73,249,077	17,060	73,266,137	26,265
2,650	58,004,954	177,257	58,182,211	190,487
2,540	29,351,613	5,779	29,357,392	310
15,854	9,302,914	21,531	9,324,445	59,325
.....	5,052,955	.....	5,052,955	1,561
352	12,450,473	.....	12,450,473	.....
530	4,885,015	2,310	4,887,325	2,163
747,123	20,450,542	117,423	20,567,965	34,965
831,109	949,836,131	4,589,527	954,425,658	26,095,162
.....	46,440,949	6,082	46,447,031	6,092
.....	47,974,863	74,264,249	122,239,112	31,452,645
.....	.....	18,505,104	18,505,104	11,976,603
2	488,418	698,594	1,187,012	472,160
2	94,904,230	93,474,029	188,378,259	43,907,500
831,201	1,044,740,361	98,063,556	1,142,803,917	70,002,662
1,027,417	94,614,112	2,254,862	96,868,974	8,261,626
4,007,593	102,517,231	2,736,816	105,254,047	7,317,379
160,924	7,470,865	186,944	7,657,809	281,630
407,052	24,708,166	846,810	25,554,976	2,863,219
5,602,986	229,310,374	6,025,432	235,335,806	18,723,854
157,995	100,812,857	2,676,608	103,489,465	5,533,517
556,805	64,758,195	2,057,848	66,816,043	3,422,907
162,753	8,446,720	312,217	8,758,937	520,485
107,093	24,913,634	905,408	25,819,042	932,447
984,646	198,931,406	5,952,081	204,883,487	10,409,356

SOUTHERN ONTARIO

FIXED

Statement Showing Changes during

Property	In		
	Balance January 1, 1959	Changes	
		Placed in service	Equipment relocated and reclassified
	\$	\$	\$
<b>Power System—(continued)</b>			
LOCAL SYSTEMS			
Georgian Bay Division.....	366,117	41,082	36,908
COMMUNICATIONS.....	11,436,634	585,394	156,599
Total power system.....	1,312,467,945	180,362,284	119,719
<b>Administrative and Service Buildings and Equipment</b>			
BUILDINGS.....	22,333,731	669,712	97,844
OFFICE AND SERVICE EQUIPMENT.....	6,444,250	937,192	.....
Total administrative and service buildings and equipment.....	28,777,981	1,606,904	97,844
<b>Rural Power District.....</b>	201,239,035	16,130,428	21,875
Total fixed assets.....	1,542,484,961	198,099,616	.....

Changes in Assets under Construction during 1959

Under construction at January 1, 1959.....	\$ 192,658,928
Expenditures during 1959.....	117,746,934
	\$ 310,405,862
Less—Placed in service during 1959.....	198,099,616
Under construction at December 31, 1959.....	\$ 112,306,246

## SYSTEM

## ASSETS

## Year 1959 and Balances at December 31, 1959

service		Under construction December 31, 1959	Total fixed assets December 31, 1959	Expenditures during 1959
during year	Balance December 31, 1959			
Sales and retirements				
\$	\$	\$	\$	\$
18,296	425,811	2,099	427,910	39,059
334,821	11,530,608	208,386	11,738,994	410,051
7,771,950	1,484,938,560	110,251,554	1,595,190,114	99,584,982
244,098 172,373	22,857,189 7,209,069	461,361 .....	23,318,550 7,209,069	934,558 937,192
416,471	30,066,258	461,361	30,527,619	1,871,750
4,176,567	213,214,771	1,593,331	214,808,102	16,290,202
12,364,988	1,728,219,589	112,306,246	1,840,525,835	117,746,934

## Summary of Sales and Retirements during 1959

Charged to operations.....	\$ 71,801
Charged to frequency standardization.....	619,353
Charged to reserve for stabilization of rates and contingencies.....	200,798
Charged to accumulated depreciation.....	8,612,912
Proceeds from sales.....	2,860,124
	<u>\$ 12,364,988</u>



SOUTHERN ONTARIO

ACCUMULATED DEPRECIATION

December 31, 1959

	Power System	Rural Power District	Administrative and service buildings and equipment	Total
	\$	\$	\$	\$
Balances at January 1, 1959 . .	140,137,081	42,125,138	5,935,172	188,197,391
Add:				
Interest at 3% per annum on accumulated deprecia- tion on plant not fully depreciated . . . . .	3,797,355	1,247,380	60,964	5,105,699
Provision in the year				
—direct (Note 1) . . . . .	13,035,967	5,786,017		18,821,984
—indirect . . . . .	3,744		1,011,256	1,015,000
Transfer from reserve for stabilization of rates and contingencies (Note 2) . .	4,050,710			4,050,710
Special allowance (Note 3) .	8,000,000			8,000,000
Salvage recoveries less re- moval costs of assets re- tired . . . . .	137,050	192,402	9,762	45,590
Adjustments re transfer of equipment . . . . .	109,034	40,934	68,100	
Other adjustments . . . . .	104,518	6,457	7,822	118,797
	168,883,291	49,398,328	7,073,552	225,355,171
Deduct:				
Cost of fixed assets retired less proceeds from sales . .	5,129,291	3,314,433	169,188	8,612,912
Balances at December 31, 1959	163,754,000	46,083,895	6,904,364	216,742,259

NOTE 1—The provision for the year includes a special appropriation of \$1,330,255 to provide for the retirement or expected retirement for economic reasons of certain of the older hydraulic generating stations before the expiration of their normal useful life.

NOTE 2—The transfer of \$4,050,710 represents a retroactive adjustment to reflect revised estimated service lives for older generating stations purchased by the Commission in prior years.

NOTE 3—This amount provides for the estimated loss on 25-cycle power system equipment to be retired as a result of frequency standardization, and has been charged to frequency standardization costs to be written off in future years.

**SYSTEM**

**FREQUENCY STANDARDIZATION ACCOUNT**

**December 31, 1959**

	\$	\$
Balance at debit at January 1, 1959.....		191,961,575
Add adjustment of amounts charged in prior years.....		1,039,802
		193,001,377
Expenditures for frequency standardization work completed during year.....	6,795,173	
Provision for the estimated loss on 25-cycle power system equipment to be retired as a result of frequency standardization (credited to accumulated depreciation).....	8,000,000	
	14,795,173	
Less industrial customers' contributions.....	287,802	
	14,507,371	
Less portion of cost charged to cost of power for the year.....	8,155,021	
		6,352,350
Balance at debit at December 31, 1959.....		199,353,727

**EXCHANGE DISCOUNT AND PREMIUM ON FUNDED DEBT**

**December 31, 1959**

	Discount	Premium	Net discount or premium
	\$	\$	\$
Exchange discount and premium on funded debt issued in United States funds:			
Balances at January 1, 1959.....	3,859,876	4,746,301	886,425
Add discount on \$57,000,000 bonds issued February 1, 1959.....	1,733,951	.....	1,733,951
	5,593,827	4,746,301	847,526
Less discount on bonds redeemed during 1959.....	97,489	.....	97,489
Balances at December 31, 1959.....	5,496,338	4,746,301	750,037

SOUTHERN ONTARIO

STATEMENTS OF RESERVES,

Stabilization of Rates

	Power System		
	General	Stream-flow variation	Maximum power cost
	\$	\$	\$
Balances at January 1, 1959.....	94,710,280	18,530,268	461,032
Consolidation of stream-flow variation and Power System general portions (Note 1).....	18,530,268	18,530,268	.....
Consolidation of Rural rates suspense and Rural Power District general portions (Note 2).....	.....	.....	.....
	113,240,548	.....	461,032
Add:			
Interest for year on reserve balances (Note 3).....	4,366,534	.....	18,441
Provision in the year.....	.....	.....	.....
Excess of revenue over costs of supplying power to Rural Power District customers.....	.....	.....	.....
Profit on redemption of funded debt and sale of investments, net.....	505,713	.....	.....
	118,112,795	.....	479,473
Deduct:			
Expenditures during year.....	.....	.....	.....
Withdrawal in year applied in reduction of cost of power.....	.....	.....	18,441
Transfer to accumulated depreciation (Note 4)....	4,050,710	.....	.....
Write-off of certain fixed assets in a rural operating area to reflect a physical inventory taken during the year.....	.....	.....	.....
Balances at December 31, 1959.....	114,062,085	.....	461,032

NOTE 1—As of January 1, 1959 the portion of the reserve previously designated as "Stream-flow variation" was consolidated with the general portion of the Power System reserve, which portion is available to meet unfavourable stream-flow variations and other contingencies.

NOTE 2—As of January 1, 1959 the portion of the reserve previously designated as "Rural rates suspense" was combined with the general portion of the Rural Power District reserve, as the two portions are available for the same purposes.

NOTE 3—Interest on maximum power cost was calculated at 4%, and on other portions of the reserve at a rate approximating actual earnings on the investments held for the reserves.

NOTE 4—The transfer of \$4,050,710 represents a retroactive adjustment to reflect revised estimated service lives for older generating stations purchased by the Commission in prior years.



## SYSTEM

DECEMBER 31, 1959

## and Contingencies

Rural Power District				
General	Rates suspense	Sub-total	Nuclear research	Total
\$ 1,357,660	\$ 398,451	\$ 115,457,691	\$ 4,665,767	\$ 120,123,458
.....	.....	.....	.....	.....
398,451	398,451	.....	.....	.....
1,756,111		115,457,691	4,665,767	120,123,458
68,835		4,453,810	171,787	4,625,597
.....		.....	405,065	405,065
1,085,604		1,085,604	.....	1,085,604
.....		505,713	.....	505,713
2,910,550		121,502,818	5,242,619	126,745,437
.....		.....	1,946,671	1,946,671
.....		18,441	.....	18,441
.....		4,050,710	.....	4,050,710
200,798		200,798	.....	200,798
2,709,752		117,232,869	3,295,948	120,528,817

## Sinking Fund

	Power System and Rural Power District	Administrative and service buildings and equipment	Total
Balances at January 1, 1959.....	\$ 254,207,032	\$ 3,287,495	\$ 257,494,527
Add:			
Interest at 4% per annum on reserve balances	10,168,281	131,500	10,299,781
Provision in the year—direct.....	16,084,460	.....	16,084,460
—indirect.....	2,042	235,573	237,615
	280,461,815	3,654,568	284,116,383
Deduct credits resulting from matured sinking funds (see note):			
Interest.....	466,691	35,163	501,854
Principal.....	122,856	9,257	132,113
	589,547	44,420	633,967
Balances at December 31, 1959.....	279,872,268	3,610,148	283,482,416

NOTE: The matured sinking funds at January 1, 1959 amounted to \$12,546,340.

SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Acton.....	3,525.0	16,784.0	135,775.14	17,625.00	332.33
Ailsa Craig.....	276.8	1,194.8	11,194.01	1,384.00	25.00
Ajax.....	4,914.8	26,122.7	170,765.52	.....	487.53
Alexandria.....	1,564.9	7,274.5	62,398.32	.....	145.97
Alfred.....	344.5	1,421.2	13,232.73	.....	30.53
Alliston.....	1,533.6	8,779.5	65,275.80	.....	157.71
Almonte.....	1,298.1	5,293.5	46,693.66	.....	114.50
Alvinston.....	228.0	886.4	9,006.84	1,140.00	19.72
Amherstburg.....	2,857.9	16,354.1	115,913.32	14,289.50	293.84
Ancaster Twp.....	1,947.7	9,532.4	68,980.18	9,738.50	185.92
Apple Hill.....	89.3	390.0	3,462.69	.....	8.10
Arkona.....	273.0	1,248.5	10,895.03	1,365.00	25.28
Arnprior.....	3,770.3	18,179.2	138,736.30	.....	357.47
Arthur.....	642.6	2,880.9	25,577.59	.....	58.99
Athens.....	349.8	1,706.2	13,567.56	.....	33.34
Aurora.....	3,974.1	21,879.3	144,794.37	19,870.50	400.93
Avonmore.....	39.6	162.0	1,462.65	.....	3.50
Aylmer.....	3,778.0	18,690.7	129,200.86	18,890.00	362.42
Ayr.....	623.7	2,649.6	24,292.87	3,118.50	55.96
Baden.....	785.2	3,171.7	27,021.09	3,926.00	69.00
Bancroft.....	1,132.7	4,927.1	44,422.12	.....	102.65
Barrie.....	14,539.9	79,007.8	492,720.81	.....	1,457.63
Barry's Bay.....	306.9	1,416.2	12,736.28	.....	28.54
Bath.....	271.6	1,251.8	10,583.50	.....	25.24
Beachville.....	2,458.4	15,874.9	92,795.55	12,292.00	268.80
Beamsville.....	1,315.4	6,576.6	47,408.31	6,577.00	126.79
Beaverton.....	948.3	4,618.8	38,703.43	.....	90.33
Beeton.....	396.9	1,818.4	17,436.49	.....	36.79
Belle River.....	559.2	2,787.8	22,243.20	2,796.00	53.84
Belleville.....	19,849.0	107,673.4	659,916.45	.....	1,988.24
Blenheim.....	1,235.2	6,042.3	47,222.16	6,176.00	117.88
Bloomfield.....	355.0	1,626.0	12,974.43	.....	32.90
Blyth.....	552.4	2,596.6	22,070.05	2,762.00	51.78
Bobcaygeon.....	625.8	3,014.4	24,872.24	.....	59.31
Bolton.....	896.1	4,477.0	35,616.57	4,480.50	86.35
Bothwell.....	313.8	1,350.2	12,477.21	1,569.00	28.31
Bowmanville.....	5,625.8	27,264.6	191,281.37	.....	534.64
Bracebridge.....	40.3	14.2	2,343.76	.....	2.23
Bradford.....	1,450.9	7,953.6	56,956.85	.....	146.07
Braeside.....	891.2	3,175.7	28,451.84	.....	74.54

## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
1,532.94	1,094.57	151,104.96	156,863.24	5,758.28	44.50	42.87
164.64	85.95	12,352.42	12,803.53	451.11	46.25	44.62
.....	1,526.11	169,726.94	178,161.49	8,434.55	36.25	34.53
.....	485.92	62,058.37	63,770.03	1,711.66	40.75	39.66
.....	106.97	13,156.29	13,691.90	535.61	39.75	38.20
172.46	476.21	64,784.84	68,626.36	3,841.52	44.75	42.24
.....	403.08	46,405.08	48,028.78	1,623.70	37.00	35.75
.....	70.79	10,095.77	10,601.24	505.47	46.50	44.28
1,697.00	887.42	127,912.24	135,751.04	7,838.80	47.50	44.76
.....	604.79	78,299.81	79,367.77	1,067.96	40.75	40.20
.....	27.73	3,443.06	3,484.02	40.96	39.00	38.55
.....	84.77	12,200.54	12,082.09	118.45	44.25	44.68
.....	1,170.73	137,923.04	140,441.82	2,518.78	37.25	36.58
.....	199.54	25,437.04	26,829.57	1,392.53	41.75	39.58
.....	108.62	13,492.28	13,555.71	63.43	38.75	38.57
.....	1,234.02	163,831.78	166,912.55	3,080.77	42.00	41.22
.....	12.30	1,453.85	1,463.36	9.51	37.00	36.75
240.61	1,173.12	147,039.55	162,454.36	15,414.81	43.00	38.92
77.02	193.67	27,196.64	27,442.08	245.44	44.00	43.61
1,490.61	243.82	29,281.66	29,050.56	231.10	37.00	37.29
.....	351.72	44,173.05	54,367.60	10,194.55	48.00	39.00
6,323.50	4,514.85	483,340.09	516,167.94	32,827.85	35.50	33.24
.....	95.30	12,669.52	14,270.87	1,601.35	46.50	41.28
.....	84.34	10,524.40	10,726.87	202.47	39.50	38.75
1,817.88	763.37	102,775.10	109,400.27	6,625.17	44.50	41.81
.....	408.45	53,703.65	60,179.57	6,475.92	45.75	40.83
.....	294.46	38,499.30	42,674.66	4,175.36	45.00	40.60
163.35	123.24	17,186.69	18,157.81	971.12	45.75	43.30
.....	173.64	24,919.40	25,863.39	943.99	46.25	44.56
.....	6,163.40	655,741.29	679,829.09	24,087.80	34.25	33.04
213.73	383.55	52,918.76	55,582.15	2,663.39	45.00	42.84
.....	110.23	12,897.10	12,692.14	204.96	35.75	36.33
.....	171.53	24,712.30	25,411.16	698.86	46.00	44.73
.....	194.32	24,737.23	24,561.36	175.87	39.25	39.53
144.10	278.25	39,761.07	40,996.59	1,235.52	45.75	44.37
182.73	97.44	13,794.35	15,691.67	1,897.32	50.00	43.95
.....	1,746.89	190,069.12	195,496.86	5,427.74	34.75	33.79
.....	12.52	2,333.47	1,328.25	1,005.22	33.00	57.90
51.68	450.53	56,600.71	58,036.67	1,435.96	40.00	39.01
.....	276.73	28,249.65	30,078.85	1,829.20	33.75	31.70



SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Brampton.....	9,979.3	47,591.2	325,735.41	49,896.50	941.51
Brantford.....	41,398.6	213,437.7	1,350,877.01	206,993.00	4,047.94
Brantford Twp.....	4,587.7	23,349.8	163,221.25	22,938.50	445.89
Brechin.....	112.3	491.4	4,575.67	.....	10.20
Bridgeport.....	710.2	3,270.4	25,382.58	3,551.00	65.97
Brigden.....	211.8	872.4	8,304.13	1,059.00	18.76
Brighton.....	1,205.8	5,946.3	46,791.43	.....	115.50
Brockville.....	14,423.3	72,858.5	464,718.83	.....	1,396.96
Brussels.....	569.7	2,543.2	22,520.34	2,848.50	52.21
Burford.....	699.1	3,023.9	25,025.45	3,495.50	63.20
Burgessville.....	173.0	615.2	6,081.25	865.00	14.46
Burk's Falls.....	368.7	1,838.1	15,274.60	.....	35.49
Burlington.....	25,137.2	130,407.9	883,622.29	125,686.00	2,465.09
Caledonia.....	878.7	4,387.2	31,829.93	4,393.50	84.65
Campbellford.....	257.5	158.5	6,436.74	.....	14.80
Campbellville.....	138.3	651.6	5,324.40	691.50	12.98
Cannington.....	560.8	2,596.0	23,538.49	.....	52.21
Cardinal.....	821.2	4,158.1	33,396.28	.....	79.63
Carleton Place.....	2,816.7	14,908.1	115,014.01	.....	278.84
Casselman.....	559.8	2,248.0	21,796.20	.....	49.07
Cayuga.....	365.7	1,659.0	14,140.34	1,828.50	33.74
Chalk River.....	361.7	1,980.5	13,471.75	.....	36.40
Chatham.....	17,867.7	89,750.4	579,213.83	89,338.50	1,726.06
Chatsworth.....	241.7	1,041.2	9,959.55	.....	21.82
Chesley.....	1,091.7	4,501.6	40,939.70	.....	96.74
Chesterville.....	1,104.7	5,379.5	45,069.48	.....	105.21
Chippawa.....	1,012.9	5,188.8	37,628.51	5,064.50	98.74
Clifford.....	324.3	1,555.2	13,005.31	1,621.50	30.67
Clinton.....	1,928.9	9,673.0	70,670.47	9,644.50	186.19
Cobden.....	528.7	2,324.4	18,095.01	.....	48.13
Cobourg.....	7,977.0	40,983.4	298,716.65	.....	778.72
Colborne.....	739.9	3,660.8	30,749.16	.....	70.98
Coldwater.....	484.9	2,243.0	18,358.94	.....	45.13
Collingwood.....	5,860.0	26,872.9	227,672.74	.....	543.34
Comber.....	256.9	1,026.4	10,057.41	1,284.50	22.48
Cookstown.....	287.0	1,304.4	12,539.40	.....	26.51
Cottam.....	224.6	944.8	8,048.84	1,123.00	20.07
Courtright.....	148.4	671.2	5,704.13	742.00	13.68
Creemore.....	434.0	1,965.6	17,771.34	.....	40.03
Dashwood.....	248.8	934.4	9,644.44	1,244.00	21.24

## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
4,162.37	3,098.72	369,312.33	371,730.15	2,417.82	37.25	37.01
4,751.07	12,854.86	1,544,312.02	1,583,494.87	39,182.85	38.25	37.30
.....	1,424.55	185,181.09	188,093.99	2,912.90	41.00	40.37
.....	34.88	4,550.99	4,801.19	250.20	42.75	40.53
.....	220.52	28,779.03	29,473.30	694.27	41.50	40.52
123.23	65.76	9,192.90	9,689.86	496.96	45.75	43.40
.....	374.42	46,532.51	47,929.24	1,396.73	39.75	38.59
.....	4,478.64	461,637.15	477,992.30	16,355.15	33.14	32.01
.....	176.90	25,244.15	26,919.53	1,675.38	47.25	44.31
67.37	217.08	28,299.70	29,712.49	1,412.79	42.50	40.48
38.25	53.72	6,868.74	7,178.45	309.71	41.50	39.71
.....	114.48	15,195.61	18,527.18	3,331.57	50.25	41.21
.....	7,805.47	1,003,967.91	1,062,044.58	58,076.67	42.25	39.94
369.74	272.85	35,665.49	36,027.39	361.90	41.00	40.59
.....	79.96	6,371.58	9,268.80	2,897.22	36.00	24.75
5.90	42.94	5,980.04	6,015.35	35.31	43.50	43.24
.....	174.14	23,416.56	25,797.58	2,381.02	46.00	41.76
.....	254.99	33,220.92	32,847.66	373.26	40.00	40.45
.....	874.62	114,418.23	114,077.04	341.19	40.50	40.62
.....	173.82	21,671.45	23,233.43	1,561.98	41.50	38.71
.....	113.55	15,889.03	16,364.71	475.68	44.75	43.45
.....	112.31	13,395.84	13,745.56	349.72	38.00	37.04
2,314.49	5,548.18	662,415.72	674,504.74	12,089.02	37.75	37.07
.....	75.05	9,906.32	10,633.34	727.02	44.00	40.99
.....	338.99	40,697.45	42,575.01	1,877.56	39.00	37.28
.....	343.03	44,831.66	45,292.36	460.70	41.00	40.58
7.25	314.52	42,469.98	41,528.57	941.41	41.00	41.93
.....	100.70	14,556.78	14,756.78	200.00	45.50	44.88
248.57	598.96	79,653.63	81,977.92	2,324.29	42.50	41.30
.....	164.17	17,978.97	18,239.02	260.05	34.50	34.01
.....	2,476.98	297,018.39	311,104.01	14,085.62	39.00	37.23
.....	229.75	30,590.39	31,444.69	854.30	42.50	41.34
800.51	150.56	17,453.00	20,001.11	2,548.11	41.25	35.99
18,234.28	1,819.61	208,162.19	240,257.97	32,095.78	41.00	35.52
39.30	79.77	11,245.32	12,008.51	763.19	46.75	43.78
94.20	89.12	12,382.59	13,200.84	818.25	46.00	43.14
.....	69.74	9,122.17	9,374.96	252.79	41.75	40.62
.....	46.08	6,413.73	6,493.96	80.23	43.75	43.21
81.87	134.76	17,594.74	18,337.57	742.83	42.25	40.54
80.86	77.26	10,751.56	11,753.83	1,002.27	47.25	43.22

SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Deep River.....	2,786.6	14,967.8	97,347.72	.....	277.81
Delaware.....	217.6	903.2	8,239.87	1,088.00	19.33
Delhi.....	2,055.4	10,191.0	74,676.17	10,277.00	197.37
Deseronto.....	856.9	4,453.9	35,499.06	.....	84.10
Dorchester.....	319.1	1,501.4	12,079.38	1,595.50	29.92
Drayton.....	321.5	1,285.5	11,971.47	1,607.50	28.14
Dresden.....	1,242.2	5,506.4	47,734.63	6,211.00	113.49
Drumbo.....	217.8	871.8	8,589.07	1,089.00	19.06
Dublin.....	204.0	812.3	7,267.68	1,020.00	17.82
Dundalk.....	481.7	2,079.6	20,364.18	.....	43.52
Dundas.....	6,216.7	31,287.5	203,085.82	31,083.50	601.08
Dunnville.....	3,150.1	15,623.3	118,843.21	15,750.50	302.53
Durham.....	1,430.9	6,019.0	54,805.11	.....	127.85
Dutton.....	345.4	1,584.0	15,174.72	1,727.00	32.03
East York Twp.....	32,741.0	180,962.5	1,093,329.32	163,705.00	3,309.40
Eganville.....	461.0	2,202.4	17,380.27	.....	43.53
Elmira.....	3,230.2	14,908.8	117,574.29	16,151.00	300.35
Elmvale.....	523.2	2,470.4	20,649.45	.....	49.14
Elmwood.....	166.3	569.0	6,558.50	.....	13.70
Elora.....	712.2	3,300.6	29,026.44	3,561.00	66.34
Embro.....	337.8	1,510.4	12,769.38	1,689.00	30.97
Erieau.....	339.1	1,518.4	13,147.99	1,695.50	31.11
Erie Beach.....	51.4	183.8	1,962.48	257.00	4.30
Erin.....	492.5	2,314.8	19,574.39	.....	46.17
Essex.....	1,361.4	6,800.2	56,484.93	6,807.00	131.17
Etobicoke Twp.....	94,658.0	548,410.1	3,235,456.91	473,290.00	9,791.88
Exeter.....	1,860.9	8,962.8	74,549.42	9,304.50	176.36
Fergus.....	3,308.8	13,913.4	118,822.65	16,544.00	295.60
Finch.....	243.0	1,002.2	9,365.67	.....	21.53
Flesherton.....	336.4	1,338.0	11,952.71	.....	29.37
Fonthill.....	1,026.4	4,987.2	36,817.32	5,132.00	97.66
Forest.....	1,124.4	6,674.4	48,147.94	5,622.00	117.73
Forest Hill.....	12,032.2	67,376.7	401,274.16	60,161.00	1,223.95
Frankford.....	599.2	2,758.6	20,878.41	.....	55.65
Galt.....	21,951.5	105,158.6	699,301.99	109,757.50	2,075.22
Georgetown.....	6,281.7	33,925.1	222,716.11	31,408.50	627.89
Glencoe.....	509.7	2,420.8	20,637.22	2,548.50	48.00
Goderich.....	4,775.1	23,836.9	178,642.87	23,875.50	459.97
Grand Bend.....	677.8	3,003.2	26,793.26	3,389.00	61.91
Grand Valley.....	420.2	1,685.1	17,139.38	.....	36.81



## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance <i>credited</i> or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
.....	865.28	96,760.25	98,227.36	1,467.11	35.25	34.72
14.49	67.57	9,265.14	9,355.37	90.23	43.00	42.59
.....	638.23	84,512.31	89,409.19	4,896.88	43.50	41.12
.....	266.08	35,317.08	35,559.28	242.20	41.50	41.21
31.58	99.08	13,574.14	14,199.60	625.46	44.50	42.54
89.64	99.83	13,417.64	13,824.49	406.85	43.00	41.73
258.74	385.72	53,414.66	57,140.43	3,725.77	46.00	43.00
34.12	67.63	9,595.38	10,291.05	695.67	47.25	44.06
45.35	63.34	8,196.81	8,466.02	269.21	41.50	40.18
.....	149.58	20,258.12	21,675.03	1,416.91	45.00	42.06
4,943.69	1,930.38	227,896.33	228,464.04	567.71	36.75	36.66
334.90	978.15	133,583.19	147,266.00	13,682.81	46.75	42.41
.....	444.31	54,488.65	58,310.88	3,822.23	40.75	38.08
168.19	107.25	16,658.31	17,617.56	959.25	51.00	48.22
.....	10,166.56	1,250,177.16	1,252,343.26	2,166.10	38.25	38.18
.....	143.14	17,280.66	17,404.02	123.36	37.75	37.49
2,051.72	1,003.02	130,970.90	137,285.28	6,314.38	42.50	40.55
1,390.56	162.46	19,145.57	21,189.60	2,044.03	40.50	36.59
.....	51.64	6,520.56	6,611.08	90.52	39.75	39.21
334.71	221.15	32,097.92	32,584.68	486.76	45.75	45.07
60.32	104.89	14,324.14	14,777.29	453.15	43.75	42.41
.....	105.30	14,769.30	16,192.82	1,423.52	47.75	43.55
.....	15.96	2,207.82	2,301.65	93.83	44.75	42.92
.....	152.93	19,467.63	20,069.03	601.40	40.75	39.53
978.69	422.73	62,021.68	60,924.50	1,097.18	44.75	45.56
379.33	29,392.68	3,688,766.78	3,833,646.99	144,880.21	40.50	38.97
251.11	577.84	83,201.33	86,068.56	2,867.23	46.25	44.71
219.25	1,027.43	134,415.57	138,967.50	4,551.93	42.00	40.62
.....	75.45	9,311.75	9,659.90	348.15	39.75	38.32
.....	104.45	11,877.63	12,781.62	903.99	38.00	35.31
.....	318.71	41,728.27	43,879.67	2,151.40	42.75	40.65
176.16	349.15	53,362.36	57,341.85	3,979.49	51.00	47.46
.....	3,736.17	458,922.94	466,248.09	7,325.15	38.75	38.14
.....	186.06	20,748.00	21,272.78	524.78	35.50	34.63
14,616.80	6,816.26	789,701.65	801,228.85	11,527.20	36.50	35.97
4,666.18	1,950.56	248,135.76	263,830.00	15,694.24	42.00	39.50
.....	158.27	23,075.45	24,208.76	1,133.31	47.50	45.28
695.28	1,482.74	200,800.32	231,593.57	30,793.25	48.50	42.05
5.76	210.46	30,027.95	34,567.81	4,539.86	51.00	44.30
.....	130.47	17,045.72	18,698.90	1,653.18	44.50	40.57

## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Granton.....	106.0	441.8	4,032.51	530.00	9.43
Gravenhurst.....	2,411.9	12,190.2	89,991.39	.....	233.66
Grimsby.....	2,407.7	12,967.7	90,677.65	12,038.50	240.35
Guelph.....	32,381.8	162,662.1	1,029,871.81	161,909.00	3,128.20
Hagersville.....	1,696.9	6,900.0	62,395.10	8,484.50	149.51
Hamilton.....	294,518.1	1,849,882.2	10,109,031.86	1,217,560.50	31,741.32
Hanover.....	3,571.7	14,912.8	120,854.98	.....	318.14
Harriston.....	1,201.4	5,788.6	45,277.07	6,007.00	113.88
Harrow.....	1,225.2	5,701.1	47,872.52	6,126.00	114.33
Hastings.....	402.5	1,886.0	14,975.02	.....	37.68
Havelock.....	449.3	2,360.4	17,594.22	.....	44.32
Hawkesbury.....	2,645.1	13,791.7	87,176.17	.....	260.01
Hensall.....	729.7	3,467.7	28,712.57	3,648.50	68.74
Hespeler.....	4,851.3	23,355.5	161,746.92	24,256.50	459.65
Highgate.....	187.8	625.2	7,110.49	939.00	15.31
Holstein.....	99.7	400.4	3,916.14	.....	8.73
Huntsville.....	2,383.5	13,424.9	94,446.23	.....	243.15
Ingersoll.....	5,269.2	25,100.0	188,984.05	26,346.00	496.87
Iroquois.....	695.9	3,340.3	27,440.57	.....	65.84
Jarvis.....	307.5	1,478.4	12,138.75	1,537.50	29.12
Kemptville.....	1,413.8	6,592.2	56,437.41	.....	132.05
Kincardine.....	1,896.3	9,802.5	78,722.00	.....	185.65
Kingston.....	36,328.0	200,691.9	1,192,287.13	.....	3,671.11
Kingsville.....	1,646.3	8,165.4	58,522.06	8,231.50	158.11
Kirkfield.....	77.3	321.8	3,132.35	.....	6.88
Kitchener.....	60,586.4	324,222.5	1,805,711.07	302,932.00	6,029.44
Lakefield.....	1,105.6	5,193.6	36,551.09	.....	103.60
Lambeth.....	746.6	3,361.2	27,783.80	3,733.00	68.67
Lanark.....	258.4	1,201.4	10,096.98	.....	24.11
Lancaster.....	225.0	1,097.5	8,928.50	.....	21.45
Leamington.....	5,412.6	28,630.2	202,224.20	27,063.00	535.67
Lindsay.....	7,088.6	40,651.0	274,024.20	.....	729.58
Listowel.....	2,785.2	12,900.0	99,310.05	13,926.00	259.37
London.....	61,909.2	368,851.3	2,105,206.51	309,546.00	6,494.55
London Twp.....	1,477.4	6,606.4	51,357.14	7,387.00	135.49
Long Branch.....	6,241.8	32,017.2	214,115.43	31,209.00	608.87
L'Orignal.....	310.4	1,385.0	12,287.43	.....	28.44
Lucan.....	513.7	2,364.4	20,693.01	2,568.50	47.71
Lucknow.....	637.7	2,948.0	26,137.20	.....	59.34
Lynden.....	259.7	1,185.4	9,843.88	1,298.50	24.03

## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
64.30	32.91	4,474.73	4,479.91	5.18	42.25	42.20
.....	748.93	89,476.12	91,653.46	2,177.34	38.00	37.10
.....	747.62	102,208.88	111,354.56	9,145.68	46.25	42.45
13,921.66	10,055.01	1,170,932.34	1,222,413.25	51,480.91	37.75	36.16
2,083.68	526.91	68,418.52	70,423.08	2,004.56	41.50	40.32
53,650.96	91,452.14	11,213,230.58	11,412,577.66	199,347.08	38.75	38.07
.....	1,109.07	120,064.05	126,796.84	6,732.79	35.50	33.62
174.43	373.05	50,850.47	51,959.83	1,109.36	43.25	42.33
327.13	380.44	53,405.28	54,215.86	810.58	44.25	43.59
.....	124.98	14,887.72	16,101.67	1,213.95	40.00	36.99
.....	139.52	17,499.02	18,869.20	1,370.18	42.00	38.95
.....	821.34	86,614.84	88,609.45	1,994.61	33.50	32.75
144.44	226.59	32,058.78	32,108.28	49.50	44.00	43.93
2,138.62	1,506.39	182,818.06	185,563.82	2,745.76	38.25	37.68
90.17	58.31	7,916.32	8,873.57	957.25	47.25	42.15
.....	30.96	3,893.91	4,162.84	268.93	41.75	39.06
.....	740.12	93,949.26	97,721.46	3,772.20	41.00	39.42
5,605.85	1,636.17	208,584.90	214,720.90	6,136.00	40.75	39.59
.....	216.09	27,290.32	31,141.13	3,850.81	44.75	39.22
.....	95.49	13,609.88	14,068.13	458.25	45.75	44.26
.....	439.01	56,130.45	57,258.92	1,128.47	40.50	39.70
.....	588.83	78,318.82	89,599.00	11,280.18	47.25	41.30
.....	11,280.37	1,184,677.87	1,235,150.58	50,472.71	34.00	32.61
1,057.77	511.20	65,342.70	67,499.67	2,156.97	41.00	39.69
.....	24.00	3,115.23	3,518.66	403.43	45.50	40.30
26,798.18	18,812.95	2,069,061.38	2,120,525.16	51,463.78	35.00	34.15
.....	343.30	36,311.39	39,801.00	3,489.61	36.00	32.84
28.60	231.84	31,325.03	31,357.20	32.17	42.00	41.96
.....	80.24	10,040.85	10,465.55	424.70	40.50	38.86
.....	69.86	8,880.09	8,943.43	63.34	39.75	39.47
1,246.41	1,680.69	226,895.77	232,740.35	5,844.58	43.00	41.92
.....	2,201.11	272,552.67	274,684.87	2,132.20	38.75	38.45
563.27	864.85	112,067.30	114,889.85	2,822.55	41.25	40.24
53,504.79	19,223.71	2,348,518.56	2,398,980.87	50,462.31	38.75	37.93
.....	458.75	58,420.88	58,727.33	306.45	39.75	39.54
.....	1,938.17	243,995.13	251,231.12	7,235.99	40.25	39.09
.....	96.39	12,219.48	12,182.54	36.94	39.25	39.37
205.24	159.51	22,944.47	24,141.55	1,197.08	47.00	44.67
.....	198.01	25,998.53	29,331.91	3,333.38	46.00	40.77
143.77	80.64	10,942.00	11,167.83	225.83	43.00	42.13



## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Madoc.....	761.7	3,744.6	30,705.83		72.85
Magnetawan.....	69.4	307.2	2,874.11		6.34
Markdale.....	591.9	2,768.0	24,010.19		55.36
Markham.....	2,329.6	11,155.1	87,531.47	11,648.00	220.19
Marmora.....	649.3	3,221.6	27,487.48		62.37
Martintown.....	151.4	548.8	5,408.66		12.74
Maxville.....	409.5	1,633.9	17,212.92		35.80
Meaford.....	2,416.3	12,701.1	100,842.87		238.42
Merlin.....	260.1	1,178.4	10,017.39	1,300.50	23.98
Merrickville.....	384.3	1,942.8	14,740.59		37.23
Merritton.....	17,644.4	103,812.9	603,603.44	88,222.00	1,839.33
Midland.....	6,723.6	34,300.3	238,402.94		654.20
Mildmay.....	480.3	1,987.8	17,945.61		42.62
Millbrook.....	381.8	1,769.6	15,711.13		35.57
Milton.....	4,132.7	20,718.5	153,924.57	20,663.50	398.87
Milverton.....	836.1	3,220.4	32,372.21	4,180.50	72.07
Mimico.....	7,435.0	41,708.7	253,601.03	37,175.00	756.98
Mitchell.....	1,575.3	7,834.1	57,682.46	7,876.50	151.48
Moorefield.....	183.5	742.0	6,681.31	917.50	16.13
Morrisburg.....	1,190.3	5,876.0	47,445.53		114.07
Mount Brydges.....	307.9	1,371.6	11,553.11	1,539.50	28.18
Mount Forest.....	1,671.9	7,528.8	64,145.75		153.79
Napanee.....	3,212.5	15,297.7	123,681.96		302.88
Neustadt.....	245.8	969.3	8,845.16		21.39
Newboro.....	87.7	356.3	3,171.91		7.72
Newburgh.....	236.9	1,022.2	9,306.69		21.40
Newbury.....	97.9	427.0	3,913.50	489.50	8.88
Newcastle.....	798.6	3,761.0	28,226.04		74.92
New Hamburg.....	1,207.0	5,622.4	46,108.95	6,035.00	112.69
Newmarket.....	5,442.5	27,539.6	187,865.27	27,212.50	527.55
New Toronto.....	27,536.7	157,406.0	951,252.76	137,683.50	2,829.61
Niagara.....	1,566.5	8,603.7	58,785.10	7,832.50	157.86
Niagara Falls.....	15,925.6	86,782.9	533,074.53	79,628.00	1,598.73
North York Twp.....	134,303.0	755,466.1	4,563,737.11	671,515.00	13,691.99
Norwich.....	894.9	4,319.5	35,674.36	4,474.50	84.89
Norwood.....	511.0	2,461.3	21,464.85		48.43
Oakville.....	8,724.5	45,800.7	294,523.34	43,622.50	860.36
Oil Springs.....	224.0	1,249.0	9,399.15	1,120.00	22.74
Ormemee.....	370.8	1,748.0	15,029.64		34.80
Orangeville.....	2,829.8	13,650.5	114,314.25		268.35

## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
.....	236.52	30,542.16	31,802.72	1,260.56	41.75	40.10
.....	21.55	2,858.90	3,538.58	679.68	51.00	41.19
.....	183.80	23,881.75	24,565.59	683.84	41.50	40.35
.....	723.38	98,676.28	102,502.05	3,825.77	44.00	42.36
.....	201.62	27,348.23	29,868.18	2,519.95	46.00	42.12
.....	47.01	5,374.39	5,562.12	187.73	36.75	35.50
.....	127.15	17,121.57	17,507.57	386.00	42.75	41.81
.....	750.30	100,330.99	106,316.45	5,985.46	44.00	41.52
.....	80.77	11,261.10	11,899.20	638.10	45.75	43.30
.....	119.33	14,658.49	14,989.02	330.53	39.00	38.14
.....	5,478.85	688,185.92	683,719.53	4,466.39	38.75	39.00
13,623.19	2,087.78	223,346.17	240,366.93	17,020.76	35.75	33.22
.....	149.14	17,839.09	18,972.86	1,133.77	39.50	37.14
.....	118.56	15,628.14	16,416.70	788.56	43.00	40.93
3,564.16	1,283.26	170,139.52	174,607.28	4,467.76	42.25	41.17
460.58	259.62	35,904.58	36,998.91	1,094.33	44.25	42.94
1,159.79	2,308.68	288,064.54	284,389.08	3,675.46	38.25	38.74
1,796.96	489.15	63,424.33	65,373.92	1,949.59	41.50	40.26
48.27	56.98	7,509.69	7,705.60	195.91	42.00	40.92
.....	369.61	47,189.99	52,371.00	5,181.01	44.00	39.65
45.83	95.61	12,979.35	13,164.53	185.18	42.75	42.15
.....	519.15	63,780.39	66,038.08	2,257.69	39.50	38.15
.....	997.53	122,987.31	132,517.36	9,530.05	41.25	38.28
.....	76.33	8,790.22	9,216.25	426.03	37.50	35.76
.....	27.24	3,152.39	3,201.05	48.66	36.50	35.95
.....	73.56	9,254.53	9,535.22	280.69	40.25	39.07
.....	30.40	4,381.48	4,919.92	538.44	50.25	44.75
.....	247.98	28,052.98	28,551.14	498.16	35.75	35.13
2,008.24	374.79	49,873.61	49,788.41	85.20	41.25	41.32
.....	1,689.97	213,915.35	214,980.07	1,064.72	39.50	39.30
4,623.52	8,550.55	1,078,591.80	1,087,699.33	9,107.53	39.50	39.16
70.01	486.42	66,219.03	65,009.06	1,209.97	41.50	42.27
4,683.31	4,945.13	604,672.82	617,116.34	12,443.52	38.75	37.97
3.50	41,703.02	5,207,237.58	5,237,817.69	30,580.11	39.00	38.78
1,686.35	277.88	38,269.52	38,478.55	209.03	43.00	42.77
.....	158.67	21,354.61	23,123.86	1,769.25	45.25	41.79
.....	2,709.08	336,297.12	342,438.26	6,141.14	39.25	38.55
162.00	69.56	10,310.33	11,423.60	1,113.27	51.00	46.03
.....	115.14	14,949.30	15,575.35	626.05	42.00	40.32
.....	878.69	113,703.91	126,633.92	12,930.01	44.75	40.18

## SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and net fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Orillia.....	4,486.9	16,289.9	165,137.29	.....	377.95
Orono.....	435.6	1,968.6	16,310.04	.....	40.13
Oshawa.....	57,762.6	308,757.7	1,872,711.71	.....	5,745.28
Ottawa.....	139,947.1	741,507.8	4,551,692.75	.....	13,861.48
Otterville.....	343.2	1,471.2	12,367.45	1,716.00	30.91
Owen Sound.....	10,980.2	54,962.9	379,226.47	.....	1,058.99
Paisley.....	408.9	1,955.6	15,438.07	.....	38.63
Palmerston.....	1,016.1	5,013.8	36,295.56	5,080.50	97.36
Paris.....	3,337.2	15,668.7	109,727.46	16,686.00	312.66
Parkhill.....	725.6	3,323.2	28,968.11	3,628.00	67.24
Parry Sound.....	1,650.6	8,586.2	65,549.71	.....	162.07
Penetanguishene.....	2,423.5	12,776.2	89,729.64	.....	239.47
Perth.....	3,516.3	16,856.1	132,079.83	.....	332.52
Peterborough.....	35,501.3	199,189.1	1,199,984.92	.....	3,614.78
Petrolia.....	1,311.3	6,862.5	54,201.71	6,556.50	129.12
Petrolia Waterworks.....	155.6	724.4	5,956.35	778.00	14.52
Pickering.....	728.3	3,705.4	27,182.86	.....	70.78
Pictou.....	3,414.8	17,150.5	127,333.85	.....	329.86
Plattsville.....	614.9	2,608.0	22,460.83	3,074.50	55.13
Point Edward.....	4,067.5	17,235.7	131,240.69	20,337.50	364.55
Port Burwell.....	209.8	932.0	8,279.13	1,049.00	19.19
Port Colborne.....	5,425.6	29,523.2	193,300.09	27,128.00	544.28
Port Credit.....	9,233.5	64,340.3	354,721.58	46,167.50	1,051.47
Port Dalhousie.....	1,391.7	8,361.6	53,163.06	6,958.50	146.62
Port Dover.....	1,765.5	9,579.0	64,648.61	8,827.50	176.87
Port Elgin.....	1,087.2	5,307.2	45,607.07	.....	103.66
Port Hope.....	7,191.8	39,310.3	273,885.32	.....	723.03
Port McNicoll.....	1,128.9	3,224.0	37,610.53	.....	87.33
Port Perry.....	1,118.3	5,424.0	45,293.45	.....	106.31
Port Rowan.....	231.5	1,073.8	9,034.16	1,157.50	21.58
Port Stanley.....	1,009.0	5,112.8	40,812.80	5,045.00	97.86
Prescott.....	3,293.1	15,673.3	123,926.87	.....	310.41
Preston.....	8,469.6	41,218.4	281,417.33	42,348.00	806.42
Priceville.....	42.8	177.8	1,846.42	.....	3.81
Princeton.....	236.6	993.8	8,986.27	1,183.00	21.13
Queenston.....	285.4	1,560.5	10,391.79	1,427.00	28.70
Renfrew.....	3,228.9	14,188.8	177,530.37	.....	293.89
Richmond.....	452.0	2,102.0	15,616.03	.....	42.17
Richmond Hill.....	7,395.7	36,939.6	278,484.81	36,978.50	712.58
Ridgetown.....	1,205.3	5,403.1	47,769.77	6,026.50	110.65
Ripley.....	270.6	1,209.6	11,039.71	.....	24.81



## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
.....	1,393.25	164,121.99	167,136.72	3,014.73	37.25	36.58
.....	135.26	16,214.91	16,552.49	337.58	38.00	37.22
.....	17,936.13	1,860,520.86	1,978,370.49	117,849.63	34.25	32.21
40.45	43,455.60	4,522,058.18	4,478,308.00	43,750.18	32.00	32.31
39.30	106.57	13,968.49	14,843.40	874.91	43.25	40.70
.....	3,409.50	376,875.96	395,285.40	18,409.44	36.00	34.32
.....	126.97	15,349.73	15,946.17	596.44	39.00	37.54
163.39	315.52	40,994.51	42,420.78	1,426.27	41.75	40.35
967.32	1,036.25	124,722.55	129,315.22	4,592.67	38.75	37.37
.....	225.31	32,438.04	33,375.68	937.64	46.00	44.71
.....	512.53	65,199.25	70,975.46	5,776.21	43.00	39.50
6,758.88	752.53	82,457.70	87,244.80	4,787.10	36.00	34.02
.....	1,091.86	131,320.49	132,740.96	1,420.47	37.75	37.35
.....	11,023.67	1,192,576.03	1,233,671.63	41,095.60	34.75	33.59
717.74	407.18	59,762.41	62,284.77	2,522.36	47.50	45.58
.....	48.31	6,700.56	7,390.23	689.67	47.50	43.07
.....	226.15	27,027.49	28,403.40	1,375.91	39.00	37.11
.....	1,060.35	126,603.36	128,908.39	2,305.03	37.75	37.07
97.08	190.93	25,302.45	26,595.87	1,293.42	43.25	41.15
180.96	1,263.02	150,498.76	161,683.46	11,184.70	39.75	37.00
2.64	65.15	9,279.53	10,330.61	1,051.08	49.25	44.24
.....	1,684.73	219,287.64	222,448.25	3,160.61	41.00	40.42
389.27	2,867.13	398,684.15	392,425.52	6,258.63	42.50	43.18
.....	432.14	59,836.04	59,146.90	689.14	42.50	43.00
.....	548.21	73,104.77	70,621.66	2,483.11	40.00	41.41
.....	337.59	45,373.14	49,196.17	3,823.03	45.25	41.73
.....	2,233.16	272,375.19	276,884.95	4,509.76	38.50	37.87
44.15	350.54	37,303.17	38,948.50	1,645.33	34.50	33.04
.....	347.25	45,052.51	46,969.65	1,917.14	42.00	40.29
.....	71.88	10,141.36	11,229.77	1,088.41	48.50	43.80
1,961.02	313.31	43,681.33	45,656.11	1,974.78	45.25	43.29
.....	1,022.56	123,214.72	125,138.73	1,924.01	38.00	37.42
6,731.62	2,629.93	315,210.20	311,259.33	3,950.87	36.75	37.22
.....	13.29	1,836.94	1,927.14	90.20	45.00	42.92
21.21	73.47	10,095.72	10,648.89	553.17	45.00	42.66
.....	88.63	11,758.86	11,700.73	58.13	41.00	41.20
.....	1,002.62	116,821.64	116,240.70	580.94	36.00	36.18
.....	140.35	15,517.85	15,820.00	302.15	35.00	34.33
.....	2,296.47	313,879.42	319,862.95	5,983.53	43.25	42.44
217.00	374.27	53,315.65	58,154.52	4,838.87	48.25	44.24
.....	84.02	10,980.50	12,244.65	1,264.15	45.25	40.58

## SOUTHERN ONTARIO

## STATEMENT OF THE ALLOCATION

for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Riverside.....	5,217.5	25,949.8	189,235.00	26,087.50	501.73
Rockland.....	847.0	3,928.3	29,538.83	.....	78.93
Rockwood.....	373.6	1,769.6	15,676.60	1,868.00	35.15
Rodney.....	401.8	1,844.0	15,702.63	2,009.00	37.27
Rosseau.....	91.9	366.0	3,668.56	.....	8.03
Russell.....	253.4	1,154.8	8,830.71	.....	23.44
St. Catharines.....	41,496.3	209,440.8	1,340,579.38	207,481.50	4,017.53
St. Clair Beach.....	521.6	2,456.0	18,980.04	2,608.00	48.93
St. George.....	425.8	2,003.2	15,930.84	2,129.00	39.93
St. Jacobs.....	434.9	1,754.9	17,519.66	2,174.50	38.19
St. Mary's.....	10,209.5	66,929.8	360,264.12	51,047.50	1,125.21
St. Thomas.....	13,335.2	75,279.2	445,745.17	66,676.00	1,361.88
Sandwich East Twp.....	5,419.1	28,348.6	195,746.65	27,095.50	533.51
Sandwich West Twp.....	9,624.7	48,266.8	342,953.90	48,123.50	929.07
Sarnia.....	109,129.4	842,417.5	4,043,759.92	545,647.00	13,155.29
Scarborough Twp.....	109,917.6	587,137.5	3,682,663.35	549,588.00	10,929.22
Seaforth.....	1,527.3	7,011.0	48,620.55	7,636.50	141.67
Shelburne.....	755.2	3,450.0	31,515.35	.....	69.91
Simcoe.....	6,798.6	35,892.8	228,084.58	33,993.00	672.24
Smith's Falls.....	6,619.1	31,671.0	217,156.00	.....	625.41
Smithville.....	519.3	2,174.1	19,718.79	2,596.50	46.31
Southampton.....	1,011.4	5,255.6	43,359.00	.....	99.26
Springfield.....	207.8	964.0	7,368.04	1,039.00	19.36
Stamford Twp.....	14,988.3	80,109.7	500,220.51	74,941.50	1,490.72
Stayner.....	864.3	4,039.2	35,401.33	.....	80.81
Stirling.....	768.0	3,525.8	26,520.50	.....	71.24
Stoney Creek.....	3,098.1	15,886.7	111,644.07	15,490.50	302.16
Stouffville.....	1,645.6	7,612.0	63,665.12	8,228.00	153.16
Stratford.....	14,428.4	74,282.8	466,281.82	72,142.00	1,409.87
Strathroy.....	3,228.3	16,186.6	105,279.38	16,141.50	311.60
Streetsville.....	2,606.2	13,028.1	92,223.56	13,031.00	251.21
Sunderland.....	369.4	1,594.0	14,883.83	.....	33.36
Sundridge.....	277.0	1,378.1	11,535.82	.....	26.64
Sutton.....	902.3	4,463.2	35,850.57	4,511.50	86.55
Swansea.....	5,391.8	31,894.4	186,943.95	26,959.00	563.58
Tara.....	354.8	1,551.6	13,735.98	.....	32.23
Tavistock.....	735.2	3,591.2	28,122.53	3,676.00	70.12
Tecumseh.....	1,191.3	5,708.5	43,254.70	5,956.50	112.64
Teeswater.....	599.6	2,763.6	24,795.23	.....	55.72
Thamesford.....	576.8	2,804.9	23,897.20	2,884.00	54.90

## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
.....	1,620.11	214,204.12	215,222.56	1,018.44	41.25	41.05
.....	263.01	29,354.75	30,279.06	924.31	35.75	34.66
688.56	116.01	16,775.18	17,280.15	504.97	46.25	44.90
80.67	124.76	17,543.47	20,490.56	2,947.09	51.00	43.67
.....	28.54	3,648.05	3,882.77	234.72	42.25	39.70
.....	78.69	8,775.46	8,996.88	221.42	35.50	34.63
.....	12,885.21	1,539,193.20	1,556,110.33	16,917.13	37.50	37.09
.....	161.96	21,475.01	21,383.89	91.12	41.00	41.17
134.46	132.22	17,833.09	18,521.96	688.87	43.50	41.88
103.41	135.04	19,493.90	19,351.58	142.32	44.50	44.83
4,462.33	3,170.20	404,804.30	423,694.25	18,889.95	41.50	39.65
14,866.52	4,140.77	494,775.76	513,404.56	18,628.80	38.50	37.10
.....	1,682.70	221,692.96	230,312.83	8,619.87	42.50	40.91
.....	2,988.61	389,017.86	409,049.05	20,031.19	42.50	40.42
3,149.99	33,886.26	4,565,525.96	4,474,307.13	91,218.83	41.00	41.87
.....	34,131.00	4,209,049.57	4,314,266.12	105,216.55	39.25	38.29
4,216.26	474.25	51,708.21	52,311.18	602.97	34.25	33.86
.....	234.50	31,350.76	35,118.36	3,767.60	46.50	41.51
255.43	2,111.06	260,383.33	261,745.78	1,362.45	38.50	38.30
.....	2,055.33	215,726.08	221,738.17	6,012.09	33.50	32.59
.....	161.25	22,200.35	23,885.89	1,685.54	46.00	42.75
.....	314.05	43,144.21	46,018.70	2,874.49	45.50	42.66
42.76	64.52	8,319.12	8,937.18	618.06	43.00	40.03
611.21	4,654.08	571,387.44	569,555.08	1,832.36	38.00	38.12
1,578.81	268.38	33,634.95	36,084.53	2,449.58	41.75	38.92
.....	238.48	26,353.26	26,687.99	334.73	34.75	34.31
.....	962.01	126,474.72	129,346.04	2,871.32	41.75	40.82
.....	510.99	71,535.29	72,819.66	1,284.37	44.25	43.47
11,211.76	4,480.23	524,141.70	541,064.39	16,922.69	37.50	36.33
470.03	1,002.43	120,260.02	123,480.56	3,220.54	38.25	37.25
.....	809.27	104,696.50	109,459.35	4,762.85	42.00	40.17
.....	114.70	14,802.49	16,251.76	1,449.27	44.00	40.07
.....	86.02	11,476.44	14,128.73	2,652.29	51.00	41.43
.....	280.18	40,168.44	43,311.60	3,143.16	48.00	44.52
.....	1,674.23	212,792.30	214,322.08	1,529.78	39.75	39.47
.....	110.17	13,658.04	15,345.10	1,687.06	43.25	38.50
454.00	228.29	31,186.36	31,428.72	242.36	42.75	42.42
.....	369.92	48,953.92	50,929.15	1,975.23	42.75	41.09
.....	186.19	24,664.76	26,980.14	2,315.38	45.00	41.14
135.85	179.10	26,521.15	27,395.62	874.47	47.50	45.98



SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Thamesville.....	621.4	2,571.6	24,928.10	3,107.00	55.15
Theford.....	366.8	1,773.2	14,843.90	1,834.00	34.82
Thornbury.....	590.7	2,821.6	24,182.77	.....	55.77
Thorndale.....	214.2	876.2	8,098.30	1,071.00	18.92
Thornton.....	108.1	434.6	3,964.05	.....	9.48
Thorold.....	10,415.7	66,945.1	365,016.63	52,078.50	1,136.06
Tilbury.....	1,030.1	5,025.9	42,107.97	5,150.50	98.19
Tillsonburg.....	4,384.1	20,652.8	138,926.31	21,920.50	411.36
Toronto.....	552,485.8	3,275,425.4	18,556,102.07	2,762,429.00	57,813.85
Toronto Twp.....	44,891.2	297,699.1	1,633,645.79	224,456.00	4,977.84
Tottenham.....	354.5	1,746.4	14,720.97	.....	33.94
Trafalgar Twp.....	17,822.0	107,283.8	647,798.39	89,110.00	1,879.39
Trenton.....	14,942.3	86,225.0	495,523.43	.....	1,542.64
Tweed.....	951.6	4,421.7	34,049.37	.....	88.75
Uxbridge.....	1,383.0	6,988.8	57,377.71	.....	133.97
Vankleek Hill.....	493.0	2,248.1	19,554.45	.....	45.59
Victoria Harbour.....	299.8	1,408.0	12,358.15	.....	28.09
Walkerton.....	2,489.0	10,320.8	83,285.30	.....	221.06
Wallaceburg.....	7,950.1	44,111.1	270,648.99	39,750.50	805.09
Wardsville.....	155.4	730.8	6,250.27	777.00	14.57
Warkworth.....	242.5	993.1	8,730.97	.....	21.43
Wasaga Beach.....	642.0	2,374.4	25,475.17	.....	54.47
Waterdown.....	930.2	4,557.6	32,530.28	4,651.00	88.83
Waterford.....	924.6	3,939.7	33,171.54	4,623.00	83.06
Waterloo.....	14,317.7	75,084.5	423,999.23	71,588.50	1,411.24
Watford.....	1,080.2	4,825.2	42,705.05	5,401.00	99.01
Waubashene.....	281.6	1,247.2	11,413.88	.....	25.72
Welland.....	13,129.2	68,055.9	433,030.24	65,646.00	1,287.02
Wellesley.....	376.1	1,544.0	13,923.32	1,880.50	33.26
Wellington.....	522.8	2,402.4	21,521.16	.....	48.51
West Lorne.....	923.3	3,682.5	35,812.35	4,616.50	80.70
Weston.....	8,148.4	44,917.5	279,033.58	40,742.00	822.57
Westport.....	336.1	1,547.2	12,587.28	.....	31.22
Wheatley.....	777.5	3,291.2	30,553.55	3,887.50	69.66
Whitby.....	9,800.5	52,401.1	325,359.77	.....	974.92
Wiarton.....	1,134.6	5,940.0	48,173.26	.....	111.74
Williamsburg.....	199.0	877.6	8,717.34	.....	18.14
Winchester.....	1,005.4	5,218.9	41,062.23	.....	98.63
Windermere.....	113.9	489.6	4,388.05	.....	10.27
Windsor.....	75,328.4	383,462.2	2,445,052.62	376,642.00	7,322.01

## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
81.34	192.96	27,815.95	28,430.59	614.64	45.75	44.76
.....	113.90	16,598.82	17,971.16	1,372.34	49.00	45.26
.....	183.42	24,055.12	25,695.81	1,640.69	43.50	40.72
98.42	66.51	9,023.29	9,101.37	78.08	42.50	42.14
13.58	33.57	3,926.38	4,053.15	126.77	37.50	36.32
.....	3,234.22	414,996.97	414,022.75	974.22	39.75	39.84
138.92	319.86	46,897.88	49,188.05	2,290.17	47.75	45.53
5,936.24	1,361.32	153,960.61	161,116.91	7,156.30	36.75	35.12
215,393.75	171,554.84	20,989,396.33	21,132,583.13	143,186.80	38.25	37.99
1,095.54	13,939.37	1,848,044.72	1,840,539.54	7,505.18	41.00	41.17
54.51	110.08	14,590.32	15,422.21	831.89	43.50	41.16
.....	5,533.99	733,253.79	748,523.65	15,269.86	42.00	41.14
.....	4,639.80	492,426.27	478,152.54	14,273.73	32.00	32.96
.....	295.48	33,842.64	34,734.32	891.68	36.50	35.56
.....	429.44	57,082.24	58,430.72	1,348.48	42.25	41.27
.....	153.08	19,446.96	19,473.51	26.55	39.50	39.45
62.91	93.09	12,230.24	12,892.84	662.60	43.00	40.79
.....	772.87	82,733.49	93,957.87	11,224.38	37.75	33.24
1,061.42	2,468.62	307,674.54	319,991.85	12,317.31	40.25	38.70
.....	48.26	6,993.58	7,809.27	815.69	50.25	45.00
.....	75.30	8,677.10	9,580.39	903.29	39.50	35.78
.....	199.35	25,330.29	26,965.05	1,634.76	42.00	39.46
883.77	288.84	36,097.50	37,905.64	1,808.14	40.75	38.81
207.16	287.10	37,383.34	39,755.66	2,372.32	43.00	40.43
5,634.45	4,445.86	486,918.66	497,540.37	10,621.71	34.75	34.01
85.85	335.42	47,783.79	48,337.08	553.29	44.75	44.24
36.61	87.44	11,315.55	11,543.55	228.00	41.00	40.18
5,614.83	4,076.81	490,271.62	505,472.29	15,200.67	38.50	37.34
195.45	116.78	15,524.85	15,797.25	272.40	42.00	41.28
.....	162.34	21,407.33	21,434.46	27.13	41.00	40.95
48.95	286.69	40,173.91	46,855.79	6,681.88	50.75	43.51
4,843.39	2,530.20	313,224.56	321,860.16	8,635.60	39.50	38.44
.....	104.37	12,514.13	12,688.10	173.97	37.75	37.23
.....	241.43	34,269.28	35,960.13	1,690.85	46.25	44.08
.....	3,043.19	323,291.50	338,116.39	14,824.89	34.50	32.99
.....	352.31	47,932.69	50,491.21	2,558.52	44.50	42.23
.....	61.79	8,673.69	9,153.62	479.93	46.00	43.59
.....	312.17	40,848.69	42,477.09	1,628.40	42.25	40.63
.....	35.37	4,362.95	4,471.54	108.59	39.25	38.31
7,330.74	23,390.56	2,798,295.33	2,918,976.15	120,680.82	38.75	37.15

SOUTHERN ONTARIO

STATEMENT OF THE ALLOCATION  
for the Year

Municipality	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt- hours	\$	\$	\$
Wingham.....	1,919.6	9,808.0	74,630.24	.....	186.91
Woodbridge.....	1,788.8	8,903.7	66,273.16	8,944.00	172.08
Woodstock.....	16,514.2	92,677.0	549,547.53	82,571.00	1,681.67
Woodville.....	189.7	806.3	7,895.43	.....	17.02
Wyoming.....	324.6	1,415.0	12,934.54	1,623.00	29.45
York Twp.....	56,019.0	327,265.8	1,877,094.00	280,095.00	5,818.98
Zurich.....	341.6	1,452.4	13,572.82	1,708.00	30.66
Total—Municipalities.....	2,820,936.4	15,980,829.3	96,255,332.37	11,219,286.50	288,591.91
Rural Power District.....	450,785.8	2,310,451.1	17,500,852.82	1,325,599.50	43,956.47
Companies.....	582,996.3	4,510,205.7	22,398,542.91	588,801.50	72,418.91
Local distribution systems.....	1,089.0	4,616.8	97,432.86	.....	97.62
Secondary energy:					
60-cycle export.....	.....	1,735,642.0	221,855.00	2,844,626.22	.....
Other (Note 1).....	.....	1,458,019.9	.....	.....	.....
GRAND TOTAL.....	3,855,807.5	25,999,764.8	136,474,015.96	15,978,313.72	405,064.91

Notes on Summary of the Allocation of the Cost of Primary Power  
SOUTHERN ONTARIO SYSTEM

1. The total of \$136,474,015 shown under the heading “Power purchased, operating costs, and fixed charges” includes the following items of cost shown in the Statement of Operations:

Cost of power purchased.....	\$ 12,936,538
Operation, maintenance and administrative expenses.....	51,675,568
Interest.....	53,778,810
Depreciation.....	13,035,967
Sinking fund provision.....	14,921,821
Interchange of power with Northern Ontario Properties (1,518,561 megawatt-hours).....	5,028,044
Sale of secondary energy, other than 60-cycle export.....	4,846,645
	<u>\$136,474,015</u>

The method used in 1958 of allocating the cost of power supplied to each customer was followed in 1959, except for minor refinements and variations including an assessment of 5 cents per kilowatt (\$141,047) against all cost-contract municipalities. This sum, together with interest on the existing maximum cost reserve (\$18,441), was used to allow cost assistance to those municipalities with excessive charges for low-voltage distribution.



## SYSTEM

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power				Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from matured sinking fund	Sale of 60-cycle secondary export energy (Note 4)	Net revenue from direct customers	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$	\$
.....	.....	596.05	74,221.10	81,583.71	7,362.61	42.50	38.66
240.46	.....	555.44	74,593.34	76,917.68	2,324.34	43.00	41.70
6,429.35	.....	5,127.89	622,242.96	627,538.66	5,295.70	38.00	37.68
.....	.....	58.90	7,853.55	8,962.53	1,108.98	47.25	41.40
46.69	.....	100.79	14,439.51	14,689.29	249.78	45.25	44.48
.....	.....	17,394.72	2,145,613.26	2,156,731.52	11,118.26	38.50	38.30
95.69	.....	106.07	15,109.72	15,799.39	689.67	46.25	44.23
589,547.16	.....	875,941.61	106,297,722.01	108,316,447.47	2,018,725.46	.....	.....
.....	.....	139,975.52	18,730,433.27	18,730,433.27	.....	.....	.....
.....	.....	1,010,298.55	24,070,061.87	24,070,061.87	.....	.....	.....
.....	.....	5,618.58	103,149.06	103,149.06	.....	.....	.....
.....	3,066,481.22	.....	.....	.....	.....	.....	.....
589,547.16	3,066,481.22	.....	149,201,366.21	151,220,091.67	2,018,725.46	.....	.....

2. Frequency standardization costs are shown in the Statement of Operations as follows:

Interest .....	\$ 7,823,293
Portion of cost written off .....	8,155,021
	<u>\$ 15,978,314</u>

This represents a charge to all customers in the Niagara Division (except those which will not be supplied at 60 cycles) at the rate of \$5 per kilowatt on the average monthly peak load supplied amounting to \$13,133,688 plus an amount equal to the net revenue on the export of 60-cycle secondary energy amounting to \$2,844,626.

3. The provision of \$405,065 for nuclear research was charged to all customers within the system on the basis of 50 per cent on the quantity of energy supplied and 50 per cent on average monthly peak loads. It represents the Southern Ontario System's share of a total provision of \$500,000 charged proportionally on the basis of average monthly peak loads in the Southern Ontario System and the Northern Ontario Properties.

4. In 1959, proceeds of sales of 60-cycle secondary export energy were deducted from the cost of power, whereas these proceeds previously were included in amounts billed to companies. This change does not affect customers' costs because an amount equal to the net revenue from these sales (\$2,844,626 in 1959) has, as in prior years, been appropriated for frequency standardization.

## SOUTHERN ONTARIO SYSTEM

## STATEMENT OF SINKING FUND EQUITY

as at December 31, 1959

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund Jan. 1, 1959	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959			
						Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Acton.....	336,939.25	29,144.35	.....	366,083.60	30,337.13	1,213.49	319.45
Ailsa Craig.....	49,857.70	3,178.80	.....	53,036.50	3,258.31	130.33	34.31
Ajax.....	51,332.22	24,173.22	.....	75,505.44	.....	.....	.....
Alexandria.....	121,440.03	12,529.48	.....	133,969.51	.....	.....	.....
Alfred.....	4,412.82	1,785.90	.....	6,198.72	.....	.....	.....
Alliston.....	117,756.84	12,379.92	.....	130,136.76	3,413.11	136.52	35.94
Almonte.....	42,886.95	7,610.12	.....	50,497.07	.....	.....	.....
Alvinston.....	48,924.21	3,015.98	.....	51,940.19	.....	.....	.....
Amherstburg.....	263,501.59	23,517.22	.....	287,018.81	33,584.05	1,343.36	353.64
Ancaster Twp.....	103,094.58	13,183.01	.....	116,277.59	.....	.....	.....
Apple Hill.....	11,668.49	875.38	.....	12,543.87	.....	.....	.....
Arkona.....	27,164.26	2,420.26	.....	29,584.52	.....	.....	.....
Arnprior.....	170,789.78	24,223.69	.....	195,013.47	.....	.....	.....
Arthur.....	71,601.51	5,902.17	.....	77,503.68	.....	.....	.....
Athens.....	29,303.71	2,810.86	.....	32,114.57	.....	.....	.....
Aurora.....	138,937.89	24,607.26	.....	163,545.15	.....	.....	.....
Avonmore.....	.....	180.31	3,576.42	3,756.73	.....	.....	.....
Aylmer.....	237,408.34	26,185.24	.....	263,593.58	4,761.63	190.47	50.14
Ayr.....	62,820.11	5,472.91	.....	68,293.02	1,524.22	60.97	16.05
Baden.....	108,014.16	6,298.20	.....	114,312.36	29,499.53	1,179.98	310.63
Bancroft.....	21,590.66	6,928.74	.....	28,519.40	.....	.....	.....
Barrie.....	808,747.68	89,324.52	7,560.56	905,632.76	125,143.40	5,005.74	1,317.76
Barry's Bay.....	8,708.69	2,043.13	.....	10,751.82	.....	.....	.....
Bath.....	14,369.01	1,871.49	.....	16,240.50	.....	.....	.....
Beachville.....	169,810.82	17,026.03	.....	186,836.85	35,976.26	1,439.05	378.83
Beamsville.....	70,325.57	8,950.96	11.58	79,288.11	.....	.....	.....
Beaverton.....	82,894.69	8,204.31	.....	91,099.00	.....	.....	.....
Beeton.....	52,483.99	3,951.37	.....	56,435.36	3,232.67	129.31	34.04
Belle River.....	54,070.99	4,981.74	.....	59,052.73	.....	.....	.....
Belleville.....	1,061,384.21	128,731.20	.....	1,190,115.41	.....	.....	.....
Blenheim.....	151,430.28	11,751.69	.....	163,181.97	4,229.82	169.19	44.54
Bloomfield.....	32,010.35	2,889.78	.....	34,900.13	.....	.....	.....
Blyth.....	47,479.94	4,667.04	.....	52,146.98	.....	.....	.....
Bobcaygeon.....	21,563.42	3,912.45	.....	25,475.87	.....	.....	.....
Bolton.....	69,804.31	7,161.60	.....	76,965.91	2,851.84	114.07	30.03
Bothwell.....	57,269.21	3,732.08	.....	61,001.29	3,616.33	144.65	38.08
Bowmanville.....	401,163.13	40,623.24	.....	441,786.37	.....	.....	.....
Bracebridge.....	1,662.59	198.05	.....	1,860.64	.....	.....	.....
Bradford.....	92,024.34	10,635.39	.....	102,659.73	1,022.79	40.91	10.77
Braeside.....	14,829.45	4,288.91	.....	19,118.36	.....	.....	.....

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1959**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund Jan. 1, 1959	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Brampton.....	717,442.73	67,620.60	.....	785,063.33	82,374.17	3,294.97	867.40
Brantford.....	4,064,890.44	338,662.31	.....	4,403,552.75	94,024.69	3,760.99	990.08
Brantford Twp.....	174,670.52	28,327.41	.....	202,997.93	.....	.....	.....
Brechin.....	22,540.28	1,463.44	.....	24,003.72	.....	.....	.....
Bridgeport.....	42,049.40	4,961.58	.....	47,010.98	.....	.....	.....
Brigden.....	38,994.12	2,409.36	.....	41,403.48	2,438.75	97.55	25.68
Brighton.....	78,837.58	8,907.22	.....	87,744.80	.....	.....	.....
Brockville.....	934,636.44	98,083.41	.....	1,032,719.85	.....	.....	.....
Brussels.....	57,297.26	5,161.03	.....	62,458.29	.....	.....	.....
Burford.....	61,452.72	5,590.02	.....	67,042.74	1,333.33	53.33	14.04
Burgessville.....	20,342.79	1,538.59	.....	21,881.38	756.89	30.28	7.97
Burk's Falls.....	12,609.76	2,590.08	.....	15,199.84	.....	.....	.....
Burlington.....	216,208.83	124,621.38	241,758.15	582,588.36	.....	.....	.....
Caledonia.....	91,999.51	7,426.20	.....	99,425.71	7,317.19	292.69	77.05
Campbellford.....	.....	829.83	.....	829.83	.....	.....	.....
Campbellville.....	12,904.78	1,178.09	.....	14,082.87	116.81	4.67	1.23
Cannington.....	61,990.64	5,419.76	.....	67,410.40	.....	.....	.....
Cardinal.....	51,846.14	6,178.22	.....	58,024.36	.....	.....	.....
Carleton Place.....	334,045.53	27,307.97	.....	361,353.50	.....	.....	.....
Casselman.....	11,106.87	3,185.12	.....	14,291.99	.....	.....	.....
Cayuga.....	41,082.25	3,394.51	.....	44,476.76	.....	.....	.....
Chalk River.....	8,305.38	2,029.64	.....	10,335.02	.....	.....	.....
Chatham.....	1,631,662.95	139,781.65	52,740.21	1,824,184.81	45,804.37	1,832.17	482.32
Chatsworth.....	22,704.46	2,087.76	.....	24,792.22	.....	.....	.....
Chesley.....	140,773.60	10,537.93	.....	151,311.53	.....	.....	.....
Chesterville.....	105,059.43	9,767.12	.....	114,826.55	.....	.....	.....
Chippawa.....	73,112.83	7,788.33	.....	80,901.16	143.40	5.74	1.51
Clifford.....	32,860.87	2,917.77	.....	35,778.64	.....	.....	.....
Clinton.....	195,223.72	16,556.58	.....	211,780.30	4,919.28	196.77	51.80
Cobden.....	24,298.32	3,256.94	.....	27,555.26	.....	.....	.....
Cobourg.....	419,241.58	55,321.58	607.38	475,170.54	.....	.....	.....
Colborne.....	41,748.77	5,398.98	.....	47,147.75	.....	.....	.....
Coldwater.....	49,973.92	3,422.53	.....	53,396.45	15,842.36	633.69	166.82
Collingwood.....	556,308.62	31,805.04	.....	588,113.66	360,860.40	14,434.42	3,799.86
Comber.....	57,910.68	3,499.09	.....	61,409.77	777.78	31.11	8.19
Cookstown.....	25,075.41	2,367.57	.....	27,442.98	1,864.20	74.57	19.63
Cottam.....	21,261.04	1,860.07	.....	23,121.11	.....	.....	.....
Courtright.....	20,833.14	1,518.06	.....	22,351.20	.....	.....	.....
Creemore.....	45,700.16	3,855.49	.....	49,555.65	1,620.13	64.81	17.06
Dashwood.....	33,164.62	2,492.19	.....	35,656.81	1,600.19	64.01	16.85



**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1959**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund Jan. 1, 1959	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Deep River.....	11,594.09	13,048.27	.....	24,642.36	.....	.....	.....
Delaware.....	17,549.30	1,723.06	.....	19,272.36	286.80	11.47	3.02
Delhi.....	93,809.98	13,357.03	.....	107,167.01	.....	.....	.....
Deseronto.....	53,923.89	6,464.80	.....	60,388.69	.....	.....	.....
Dorchester.....	31,604.49	2,750.78	.....	34,355.27	624.88	25.00	6.58
Drayton.....	46,093.65	3,212.42	.....	49,306.07	1,773.98	70.96	18.68
Dresden.....	129,221.27	10,858.02	.....	140,079.29	5,120.61	204.82	53.92
Drumbo.....	26,807.57	2,100.40	.....	28,907.97	675.21	27.01	7.11
Dublin.....	20,614.47	1,693.12	.....	22,307.59	897.44	35.90	9.45
Dundalk.....	53,981.70	4,526.18	.....	58,507.88	.....	.....	.....
Dundas.....	563,929.96	44,700.79	.....	608,630.75	97,836.66	3,913.47	1,030.22
Dunnville.....	295,128.90	27,364.52	.....	322,493.42	6,627.73	265.11	69.79
Durham.....	121,628.94	11,457.90	.....	133,086.84	.....	.....	.....
Dutton.....	67,298.51	4,437.87	.....	71,736.38	3,328.58	133.14	35.05
East York Twp.....	1,940,694.15	223,767.39	.....	2,164,461.54	.....	.....	.....
Eganville.....	6,931.58	2,424.29	.....	9,355.87	.....	.....	.....
Elmira.....	318,060.58	25,778.54	42.85	343,881.97	40,603.99	1,624.16	427.56
Elmvale.....	56,471.99	3,334.94	.....	59,806.93	27,519.47	1,100.78	289.78
Elmwood.....	19,046.58	1,525.88	.....	20,572.46	.....	.....	.....
Elora.....	130,668.21	8,527.86	.....	139,196.07	6,623.93	264.96	69.75
Embro.....	42,331.47	3,209.88	.....	45,541.35	1,193.73	47.75	12.57
Erieau.....	35,393.58	3,087.54	.....	38,481.12	.....	.....	.....
Erie Beach.....	6,523.18	492.08	.....	7,015.26	.....	.....	.....
Erin.....	12,765.98	2,884.44	.....	15,650.42	.....	.....	.....
Essex.....	143,508.57	11,704.87	.....	155,213.44	19,368.46	774.74	203.95
Etobicoke Twp.....	2,756,731.83	540,693.79	.....	3,297,425.62	7,507.12	300.28	79.05
Exeter.....	189,068.99	16,704.98	.....	205,773.97	4,969.61	198.78	52.33
Fergus.....	293,763.17	26,798.74	.....	320,561.91	4,339.03	173.56	45.69
Finch.....	21,244.28	1,977.51	.....	23,221.79	.....	.....	.....
Flesherton.....	26,322.93	2,515.13	.....	28,838.06	.....	.....	.....
Fonthill.....	50,720.20	6,775.84	.....	57,496.04	.....	.....	.....
Forest.....	146,031.28	11,975.50	.....	158,006.78	3,486.23	139.45	36.71
Forest Hill.....	982,531.29	92,842.42	.....	1,075,373.71	.....	.....	.....
Frankford.....	16,778.26	3,316.69	.....	20,094.95	.....	.....	.....
Galt.....	2,196,782.74	166,996.61	.....	2,363,779.35	289,269.71	11,570.79	3,046.01
Georgetown.....	467,073.29	42,910.33	.....	509,983.62	92,344.73	3,693.79	972.39
Glencoe.....	72,658.54	5,439.90	.....	78,098.44	.....	.....	.....
Goderich.....	486,224.65	43,186.20	.....	529,410.85	13,759.73	550.39	144.89
Grand Bend.....	35,486.48	5,101.74	.....	40,588.22	113.96	4.56	1.20
Grand Valley.....	49,737.07	4,088.88	.....	53,825.95	.....	.....	.....

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1959**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed					Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959	Matured portion of sinking fund Jan. 1, 1959		
							Interest
	\$	\$	\$	\$	\$	\$	\$
Granton.....	24,834.39	1,407.31	.....	26,241.70	1,272.55	50.90	13.40
Gravenhurst.....	183,018.27	18,422.77	.....	201,441.04	.....	.....	.....
Grimsby.....	103,843.65	15,855.99	.....	119,699.64	.....	.....	.....
Guelph.....	2,594,389.90	228,382.46	.....	2,822,772.36	275,512.82	11,020.51	2,901.15
Hagersville.....	264,580.87	16,437.81	.....	281,018.68	41,236.47	1,649.46	434.22
Hamilton.....	23,321,780.71	2,232,550.32	3,905.91	25,558,236.94	1,061,764.48	42,470.58	11,180.38
Hanover.....	329,190.02	28,264.08	.....	357,454.10	.....	.....	.....
Harriston.....	136,735.63	11,008.94	.....	147,744.57	3,452.04	138.08	36.35
Harrow.....	124,220.74	10,622.59	.....	134,843.33	6,473.88	258.96	68.17
Hastings.....	25,407.25	2,861.24	.....	28,268.49	.....	.....	.....
Havelock.....	48,331.10	4,080.20	.....	52,411.30	.....	.....	.....
Hawkesbury.....	35,536.57	12,189.35	.....	47,725.92	.....	.....	.....
Hensall.....	69,772.40	6,201.70	.....	75,974.10	2,858.50	114.34	30.10
Hespeler.....	518,241.58	39,892.69	.....	558,134.27	42,323.84	1,692.95	445.67
Highgate.....	32,431.40	2,120.28	.....	34,551.68	1,784.43	71.38	18.79
Holstein.....	10,257.88	875.49	.....	11,133.37	.....	.....	.....
Huntsville.....	266,909.48	22,537.25	.....	289,446.73	.....	.....	.....
Ingersoll.....	677,930.54	45,775.14	.....	723,705.68	110,941.13	4,437.64	1,168.21
Iroquois.....	34,130.04	4,877.56	.....	39,007.60	.....	.....	.....
Jarvis.....	53,078.18	3,622.23	.....	56,700.41	.....	.....	.....
Kemptville.....	103,643.14	11,038.06	.....	114,681.20	.....	.....	.....
Kincardine.....	193,446.06	17,768.39	.....	211,214.45	.....	.....	.....
Kingston.....	1,630,258.16	222,699.03	.....	1,852,957.19	.....	.....	.....
Kingsville.....	171,274.62	13,277.36	.....	184,551.98	20,933.52	837.34	220.43
Kirkfield.....	11,374.96	848.57	.....	12,223.53	.....	.....	.....
Kitchener.....	5,359,565.67	437,231.49	.....	5,796,797.16	530,341.88	21,213.68	5,584.50
Lakefield.....	82,400.14	8,002.94	.....	90,403.08	.....	.....	.....
Lambeth.....	50,758.01	5,522.09	.....	56,280.10	566.00	22.64	5.96
Lanark.....	27,569.85	2,308.64	.....	29,878.49	.....	.....	.....
Lancaster.....	22,251.17	1,966.43	.....	24,217.60	.....	.....	.....
Leamington.....	441,012.18	42,136.86	1,214.36	484,363.40	24,666.67	986.67	259.74
Lindsay.....	566,835.10	56,958.19	.....	623,793.29	.....	.....	.....
Listowel.....	322,185.42	24,997.96	.....	347,183.38	11,147.20	445.89	117.38
London.....	8,564,451.40	568,372.32	.....	9,132,823.72	1,058,871.79	42,354.87	11,149.92
London Twp.....	114,221.49	11,196.50	.....	125,417.99	.....	.....	.....
Long Branch.....	291,351.83	39,882.11	.....	331,233.94	.....	.....	.....
L'Orignal.....	5,827.67	1,714.50	.....	7,542.17	.....	.....	.....
Lucan.....	68,131.48	5,133.36	.....	73,264.84	4,061.73	162.47	42.77
Lucknow.....	83,100.78	6,572.88	.....	89,673.66	.....	.....	.....
Lynden.....	41,697.37	2,752.38	.....	44,449.75	2,845.20	113.81	29.96

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1959**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund Jan. 1, 1959	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959		Interest	Provision
	\$	\$	\$	\$	\$	\$	
Madoc.....	54,244.38	5,936.32	.....	60,180.70	.....	.....	
Magnetawan.....	2,423.06	483.47	.....	2,906.53	.....	.....	
Markdale.....	47,706.12	4,782.07	.....	52,488.19	.....	.....	
Markham.....	108,162.98	15,496.87	.....	123,659.85	.....	.....	
Marmora.....	37,823.27	4,818.30	.....	42,641.57	.....	.....	
Martintown.....	10,140.12	1,068.00	.....	11,208.12	.....	.....	
Maxville.....	38,570.33	3,564.72	.....	42,135.05	.....	.....	
Meaford.....	173,645.69	19,062.55	.....	192,708.24	.....	.....	
Merlin.....	38,623.34	2,790.54	.....	41,413.88	.....	.....	
Merrickville.....	12,497.62	2,312.63	.....	14,810.25	.....	.....	
Merriton.....	1,142,146.34	126,395.27	.....	1,268,541.61	.....	.....	
Midland.....	803,498.58	48,044.58	.....	851,543.16	269,605.90	10,784.24	
Mildmay.....	27,261.96	3,279.80	.....	30,541.76	.....	2,838.95	
Millbrook.....	19,039.33	2,659.24	.....	21,698.57	.....	.....	
Milton.....	386,002.70	31,589.22	.....	417,591.92	70,535.61	2,821.42	
Milverton.....	140,811.88	9,277.10	.....	150,088.98	9,114.91	742.74	
Mimico.....	601,148.92	56,614.80	.....	657,763.72	364.60	95.98	
Mitchell.....	174,979.14	12,585.40	.....	187,564.54	22,952.52	918.10	
Moorefield.....	23,060.03	1,703.49	.....	24,763.52	35,562.20	241.69	
Morrisburg.....	53,733.76	8,069.36	.....	61,803.12	1,422.49	374.47	
Mount Brydges.....	30,340.31	2,605.34	.....	32,945.65	955.37	38.21	
Mount Forest.....	146,196.38	13,631.81	.....	159,828.19	38.21	10.06	
Napanee.....	242,073.02	25,324.34	.....	267,397.36	.....	.....	
Neustadt.....	23,863.99	2,021.02	.....	25,885.01	906.93	36.28	
Newboro.....	2,824.90	499.37	.....	3,324.27	.....	9.55	
Newburgh.....	6,966.15	1,430.63	.....	8,396.78	.....	.....	
Newbury.....	15,771.32	1,133.61	.....	16,904.93	.....	.....	
Newcastle.....	36,624.91	5,060.31	.....	41,685.22	.....	.....	
New Hamburg.....	172,207.31	10,670.91	.....	182,878.22	39,743.59	1,589.74	
Newmarket.....	184,428.78	32,463.60	.....	216,892.38	.....	418.50	
New Toronto.....	1,970,732.17	200,339.34	.....	2,171,071.51	91,500.47	3,660.02	
Niagara.....	147,704.85	13,428.20	.....	161,133.05	3,660.02	963.50	
Niagara Falls.....	1,994,307.48	147,599.79	.....	2,141,907.27	1,385.57	55.42	
North York Twp.....	3,513,180.39	747,631.36	.....	4,260,811.75	92,683.76	14.59	
Norwich.....	127,338.08	7,825.54	.....	135,163.62	3,707.35	975.96	
Norwood.....	36,341.24	4,025.71	.....	40,366.95	69.33	2.77	
Oakville.....	237,701.31	48,590.57	.....	286,291.88	33,373.22	1,334.93	
Oil Springs.....	70,623.13	3,848.52	.....	74,471.65	.....	351.42	
Omenee.....	21,268.26	2,670.66	61.64	24,000.56	.....	.....	
Orangeville.....	210,529.46	22,562.37	.....	233,091.83	3,206.08	128.24	
Orillia.....	79,011.72	23,021.65	.....	102,033.37	.....	33.76	
Orono.....	17,575.83	2,728.48	.....	20,304.31	.....	.....	
Oshawa.....	3,261,799.24	377,381.99	.....	3,639,181.23	.....	.....	
Ottawa.....	4,088,793.60	766,245.38	.....	4,855,038.98	800.57	32.02	
Otterville.....	35,234.07	2,927.28	.....	38,161.35	777.78	31.11	



**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1959**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund Jan. 1, 1959	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Owen Sound .....	1,035,339.32	88,937.62	.....	1,124,276.94	.....	.....	.....
Paisley.....	44,638.48	3,654.47	.....	48,292.95	.....	.....	.....
Palmerston.....	155,149.48	10,692.77	.....	165,842.25	3,233.62	129.34	34.05
Paris.....	408,899.63	29,926.42	.....	438,826.05	19,143.39	765.74	201.58
Parkhill.....	78,319.38	6,737.75	.....	85,057.13	.....	.....	.....
Parry Sound.....	48,988.16	10,301.96	.....	59,290.12	.....	.....	.....
Penetanguishene.....	237,640.23	13,794.81	.....	251,435.04	133,759.73	5,350.39	1,408.49
Perth.....	317,418.20	28,981.43	.....	346,399.63	.....	.....	.....
Peterborough.....	2,156,451.70	242,961.40	14.02	2,399,427.12	.....	.....	.....
Petrolia.....	324,449.17	19,659.98	.....	344,109.15	14,204.18	568.17	149.57
Pickering.....	1,591.84	3,486.75	.....	5,078.59	.....	.....	.....
Picton.....	273,115.60	26,876.09	.....	299,991.69	.....	.....	.....
Plattsville.....	44,262.52	4,509.63	.....	48,772.15	1,921.18	76.85	20.23
Point Edward.....	316,979.80	29,377.57	.....	346,357.37	3,581.20	143.25	37.71
Port Burwell.....	16,113.02	1,666.27	.....	17,779.29	52.23	2.09	.55
Port Colborne.....	509,156.39	45,525.02	.....	554,681.41	.....	.....	.....
Port Credit.....	282,076.16	57,287.03	.....	339,363.19	7,703.70	308.15	81.12
Port Dalhousie.....	164,623.81	13,448.22	.....	178,072.03	.....	.....	.....
Port Dover.....	129,451.72	13,467.01	2,405.41	145,324.14	.....	.....	.....
Port Elgin.....	90,246.69	9,207.20	.....	99,453.89	.....	.....	.....
Port Hope.....	449,738.18	53,010.35	.....	502,748.53	.....	.....	.....
Port McNicoll.....	54,160.86	6,772.68	.....	60,933.54	873.69	34.95	9.20
Port Perry.....	86,035.66	8,879.53	.....	94,915.19	.....	.....	.....
Port Rowan.....	29,536.22	2,338.81	.....	31,875.03	.....	.....	.....
Port Stanley.....	156,121.00	9,270.31	.....	165,391.31	38,809.12	1,552.36	408.66
Prescott.....	241,398.82	24,964.90	.....	266,363.72	.....	.....	.....
Preston.....	930,554.50	67,781.87	2,858.01	1,001,194.38	133,220.33	5,328.81	1,402.81
Priceville.....	4,036.60	370.79	.....	4,407.39	.....	.....	.....
Princeton.....	35,505.65	2,496.84	.....	38,002.49	419.75	16.79	4.42
Queenston.....	28,133.24	2,487.68	.....	30,620.92	.....	.....	.....
Renfrew.....	106,853.38	18,932.93	.....	125,786.31	.....	.....	.....
Richmond.....	20,636.28	2,809.39	.....	23,445.67	.....	.....	.....
Richmond Hill.....	189,814.10	43,368.00	.....	233,182.10	.....	.....	.....
Ridgetown.....	154,972.70	11,964.09	.....	166,936.79	4,294.40	171.78	45.22
Ripley.....	32,266.80	2,665.84	.....	34,932.64	.....	.....	.....
Riverside.....	389,642.49	39,883.91	.....	429,526.40	.....	.....	.....
Rockland.....	13,086.44	4,268.45	.....	17,354.89	.....	.....	.....
Rockwood.....	43,047.43	2,956.30	.....	46,003.73	13,626.78	545.07	143.49
Rodney.....	52,304.96	4,168.47	.....	56,473.43	1,596.39	63.86	16.81
Rosseau.....	13,955.72	977.79	.....	14,933.51	.....	.....	.....
Russell.....	22,743.99	2,011.92	.....	24,755.91	.....	.....	.....
St. Catharines.....	3,375,539.53	315,829.28	.....	3,691,368.81	.....	.....	.....
St. Clair Beach.....	32,092.40	3,708.14	.....	35,800.54	.....	.....	.....
St. George.....	50,003.90	3,869.08	.....	53,872.98	2,660.97	106.44	28.02
St. Jacobs.....	64,124.05	4,645.95	.....	68,770.00	2,046.53	81.86	21.55

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1959**  
**(continued)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund Jan. 1, 1959	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
St. Mary's.....	457,432.06	61,605.91	.....	519,037.97	88,310.54	3,532.42	929.91
St. Thomas.....	1,710,862.07	112,589.89	1,762.35	1,825,214.31	294,211.78	11,768.47	3,098.05
Sandwich East Twp.....	161,366.60	31,638.50	.....	193,005.10	.....	.....	.....
Sandwich West Twp.....	292,721.14	56,080.95	.....	348,802.09	.....	.....	.....
Sarnia.....	2,850,083.75	648,504.63	.....	3,498,588.38	62,339.03	2,493.56	656.43
Scarborough Twp.....	2,843,191.13	603,522.03	.....	3,446,713.16	.....	.....	.....
Seaforth.....	204,903.02	9,955.47	.....	214,858.49	83,440.65	3,337.63	878.63
Shelburne.....	81,939.59	7,091.21	.....	89,030.80	.....	.....	.....
Simcoe.....	502,550.74	49,988.71	.....	552,539.45	5,055.08	202.20	53.23
Smith's Falls.....	498,614.14	47,919.91	.....	546,534.05	.....	.....	.....
Smithville.....	29,644.68	3,696.75	.....	33,341.43	.....	.....	.....
Southampton.....	86,089.44	8,656.99	.....	94,746.43	.....	.....	.....
Springfield.....	29,808.21	2,069.96	.....	31,878.17	846.15	33.85	8.91
Stamford Twp.....	631,611.50	91,086.88	.....	722,698.38	12,095.92	483.84	127.37
Stayner.....	75,261.93	5,684.06	.....	80,945.99	31,245.01	1,249.80	329.01
Stirling.....	52,328.54	5,464.79	.....	57,793.33	.....	.....	.....
Stoney Creek.....	73,227.27	17,470.79	.....	90,698.06	.....	.....	.....
Stouffville.....	98,240.96	11,981.37	.....	110,222.33	.....	.....	.....
Stratford.....	1,951,950.30	129,147.11	.....	2,081,097.41	221,883.19	8,875.33	2336.43
Strathroy.....	337,181.54	26,850.37	.....	364,031.91	9,301.99	372.08	97.95
Streetsville.....	75,012.45	15,050.13	.....	90,062.58	.....	.....	.....
Sunderland.....	38,505.90	3,375.02	.....	41,880.92	.....	.....	.....
Sundridge.....	7,144.60	1,921.87	.....	9,066.47	.....	.....	.....
Sutton.....	84,080.34	8,084.93	.....	92,165.27	.....	.....	.....
Swansea.....	438,545.09	42,366.11	.....	480,911.20	.....	.....	.....
Tara.....	34,254.54	3,023.18	.....	37,277.72	.....	.....	.....
Tavistock.....	155,748.63	9,284.57	.....	165,033.20	8,984.81	359.39	94.61
Tecumseh.....	117,779.87	10,208.96	.....	127,988.83	.....	.....	.....
Teeswater.....	51,718.15	5,019.42	.....	56,737.57	.....	.....	.....
Thamesford.....	64,268.78	5,383.13	.....	69,651.91	2,688.51	107.54	28.31
Thamesville.....	69,924.81	5,824.55	.....	75,749.36	1,609.69	64.39	16.95
Theford.....	40,339.51	3,512.59	.....	43,852.10	.....	.....	.....
Thornbury.....	19,426.20	3,676.23	.....	23,102.43	.....	.....	.....
Thorndale.....	30,504.82	2,105.27	.....	32,610.09	1,947.77	77.91	20.51
Thornton.....	12,402.85	956.63	.....	13,359.48	268.76	10.75	2.83
Thorold.....	575,448.59	71,629.17	.....	647,077.76	.....	.....	.....
Tilbury.....	206,902.98	13,530.99	.....	220,433.97	2,749.29	109.97	28.95
Tillsonburg.....	356,616.93	26,663.72	.....	383,280.65	117,479.58	4,699.18	1,237.06
Toronto.....	68,523,740.77	5,024,299.57	.....	73,548,040.34	4,262,690.41	170,507.62	44,886.13
Toronto Twp.....	1,284,840.97	266,246.82	.....	1,551,087.79	21,680.91	867.24	228.30
Tottenham.....	40,742.08	3,318.53	.....	44,060.61	1,078.82	43.15	11.36
Trafalgar Twp.....	228,693.14	94,244.67	.....	322,937.81	.....	.....	.....
Trenton.....	657,855.17	91,812.26	.....	749,667.43	.....	.....	.....
Tweed.....	65,079.19	6,878.47	.....	71,957.66	.....	.....	.....
Uxbridge.....	98,015.82	10,794.97	.....	108,810.79	.....	.....	.....

**SOUTHERN ONTARIO SYSTEM**  
**STATEMENT OF SINKING FUND EQUITY**  
**as at December 31, 1959**  
**(concluded)**

Municipality	Net amount paid as part of cost of power by each municipality together with proportionate share of other sinking funds provided out of revenues of the system and interest allowed				Matured portion of sinking fund Jan. 1, 1959	Reduction made in cost of power from matured sinking fund	
	Balance Jan. 1, 1959	Net provision and interest credited during year	Sinking fund equity acquired through annexation	Balance Dec. 31, 1959		Interest	Provision
	\$	\$	\$	\$	\$	\$	\$
Vankleek Hill.....	9,194.42	2,727.13	.....	11,921.55	.....	.....	.....
Victoria Harbour.....	26,506.01	2,420.51	.....	28,926.52	1,245.01	49.80	13.11
Walkerton.....	152,181.29	16,592.44	.....	168,773.73	.....	.....	.....
Wallaceburg.....	878,251.13	69,782.75	.....	948,033.88	21,005.70	840.23	221.19
Wardsville.....	16,240.70	1,474.89	.....	17,715.59	.....	.....	.....
Warkworth.....	19,393.89	1,850.13	.....	21,244.02	.....	.....	.....
Wasaga Beach.....	13,689.08	3,517.31	.....	17,206.39	.....	.....	.....
Waterdown.....	83,199.07	6,681.24	.....	89,880.31	17,490.03	699.60	184.17
Waterford.....	114,736.28	8,622.54	222.64	123,581.46	4,099.72	163.99	43.17
Waterloo.....	1,131,396.07	98,344.20	.....	1,229,740.27	111,507.12	4,460.28	1,174.17
Watford.....	102,320.06	9,288.68	.....	111,608.74	1,698.96	67.96	17.89
Waubausheue.....	22,931.37	2,194.97	.....	25,126.34	724.60	28.98	7.63
Welland.....	1,378,716.56	107,600.62	.....	1,486,317.18	111,118.71	4,444.75	1,170.08
Wellesley.....	52,562.93	3,628.02	.....	56,190.95	3,868.00	154.72	40.73
Wellington.....	50,852.61	4,599.47	.....	55,452.08	.....	.....	.....
West Lorne.....	105,627.29	9,126.98	.....	114,754.27	968.66	38.75	10.20
Weston.....	921,462.98	69,112.84	.....	990,575.82	95,851.83	3,834.07	1,009.32
Westport.....	27,255.33	2,636.26	.....	29,891.59	.....	.....	.....
Wheatley.....	67,516.49	6,527.19	11.04	74,054.72	.....	.....	.....
Whitby.....	343,906.50	56,443.40	.....	400,349.90	.....	.....	.....
Wiarton.....	86,145.56	9,200.98	.....	95,346.54	.....	.....	.....
Williamsburg.....	23,945.84	1,997.33	.....	25,943.17	.....	.....	.....
Winchester.....	89,562.90	8,806.68	.....	98,369.58	.....	.....	.....
Windermere.....	12,287.02	1,011.47	.....	13,298.49	.....	.....	.....
Windsor.....	11,030,569.74	758,519.22	.....	11,789,088.96	145,076.92	5,803.08	1,527.66
Wingham.....	176,714.49	16,444.16	.....	193,158.65	.....	.....	.....
Woodbridge.....	165,634.57	14,903.81	.....	180,538.38	4,758.78	190.35	50.11
Woodstock.....	1,612,412.13	131,423.93	.....	1,743,836.06	127,238.37	5,089.53	1,339.82
Woodville.....	32,201.85	2,276.42	.....	34,478.27	.....	.....	.....
Wyoming.....	34,733.21	2,948.32	.....	37,681.53	924.03	36.96	9.73
York Twp.....	3,798,714.50	403,756.97	.....	4,202,471.47	.....	.....	.....
Zurich.....	47,991.56	3,507.16	.....	51,498.72	1,893.62	75.75	19.94
Total—Municipalities...	217,481,988.42	20,861,931.31	318,752.53	238,662,672.26	11,667,269.70	466,690.81	122,856.35
Rural Power District...	36,725,043.56	4,803,304.81	318,752.53	41,209,595.84	.....	.....	.....
Administrative and service buildings and equipment.....	3,287,495.02	322,653.29	.....	3,610,148.31	879,070.28	35,162.80	9,256.61
GRAND TOTAL.....	257,494,527.00	25,987,889.41 (see note)	.....	283,482,416.41	12,546,339.98	501,853.61	132,112.96

NOTE: The net provision and interest credited during the year consist of the following amounts shown in the statement of sinking fund reserve:

Interest.....	\$ 10,299,780.98
Provision—direct.....	16,084,460.00
—indirect.....	237,615.00
	\$ 26,621,855.98
Less credits resulting from matured sinking funds.....	633,966.57
	<u>\$ 25,987,889.41</u>



## NORTHERN ONTARIO

## FIXED

## Statement Showing Changes during

Property	In		
	Changes		
	Balance January 1, 1959	Placed in service	Equipment relocated and reclassified
<b>Power System</b>	\$	\$	\$
<b>HYDRO-ELECTRIC GENERATING STATIONS</b>			
<b>NORTHEASTERN DIVISION</b>			
Abitibi River			
Abitibi Canyon.....	19,263,021	1,719,511	.....
Otter Rapids.....	.....	.....	.....
Mississagi River			
George W. Rayner.....	18,505,499	27,286	.....
Red Rock Falls.....	.....	.....	.....
Other properties.....	23,173,449	511,285	15,723
	60,941,969	2,258,082	15,723
<b>NORTHWESTERN DIVISION</b>			
Nipigon River			
Pine Portage.....	31,970,670	32	.....
Cameron Falls.....	15,445,926	9,336	.....
Alexander.....	11,435,311	199	6,321
Aguasabon River			
Aguasabon.....	12,667,501	11,324	.....
English River			
Caribou Falls.....	23,233,035	582,008	.....
Manitou Falls.....	15,349,227	.....	.....
Winnipeg River			
Whitedog Falls.....	20,915,635	152,318	.....
Kaministiquia River			
Silver Falls.....	.....	16,162,462	.....
Other properties.....	11,175,012	145,201	.....
	142,192,317	16,757,846	6,321
<b>THERMAL-ELECTRIC GENERATING STATIONS</b>			
<b>NORTHEASTERN DIVISION</b> .....	380,751	6,739	.....
<b>NORTHWESTERN DIVISION</b>			
Thunder Bay.....	.....	.....	.....
	380,751	6,739	.....
Total generating stations.....	203,515,037	19,022,667	22,044
<b>TRANSFORMER STATIONS</b>			
Northeastern Division.....	22,898,828	1,812,353	17,210
Northwestern Division.....	9,495,193	892,307	1,977
Total transformer stations.....	32,394,021	2,704,660	19,187
<b>TRANSMISSION LINES</b>			
Northeastern Division.....	33,308,804	478,142	7,013
Northwestern Division.....	29,504,196	1,599,364	14,475
Total transmission lines.....	62,813,000	2,077,506	7,462
<b>LOCAL SYSTEMS</b>			
Northeastern Division.....	3,370,557	424,221	90,192
Northwestern Division.....	595,394	84,125	64,397
Total local systems.....	3,965,951	508,346	25,795
<b>COMMUNICATIONS</b> .....	3,704,463	352,206	6,321
Total power system.....	306,392,472	24,665,385	21,797

## PROPERTIES

## ASSETS

Year 1959 and Balances at December 31, 1959

service				
during year				
Sales and retirements	Balance December 31, 1959	Under construction December 31, 1959	Total fixed assets December 31, 1959	Expenditures during 1959
\$	\$	\$	\$	\$
3,033	20,979,499	37,128	21,016,627	754,708
.....	.....	9,978,494	9,978,494	6,934,452
.....	18,532,785	5,418	18,538,203	14,240
.....	.....	10,693,360	10,693,360	6,955,307
29,682	23,639,329	1,460,436	25,099,765	1,507,508
32,715	63,151,613	22,174,836	85,326,449	16,166,215
500	31,970,202	2,637	31,972,839	2,393
1,700	15,453,562	189,034	15,642,596	188,148
.....	11,428,791	93,334	11,522,125	79,044
650	12,678,175	3,838	12,682,013	11,815
424	23,814,619	111,745	23,926,364	644,043
525	15,348,702	165,089	15,513,791	9,682
482	20,762,835	111,745	20,874,580	378,534
.....	16,162,462	87,757	16,250,219	4,805,194
37,234	11,282,979	179,717	11,462,696	189,853
41,515	158,902,327	944,896	159,847,223	5,551,638
.....	387,490	.....	387,490	6,739
.....	.....	10,332,465	10,332,465	6,523,566
.....	387,490	10,332,465	10,719,955	6,530,305
74,230	222,441,430	33,452,197	255,893,627	28,248,158
68,259	24,660,132	386,780	25,046,912	1,407,676
206,493	10,182,984	164,496	10,347,480	655,844
274,752	34,843,116	551,276	35,394,392	2,063,520
326,069	33,467,890	832,356	34,300,246	951,172
248,553	30,840,532	353,455	31,193,987	798,987
574,622	64,308,422	1,185,811	65,494,233	1,750,159
70,900	3,814,070	77,664	3,891,734	348,047
4,112	611,010	6,255	617,265	66,542
75,012	4,425,080	83,919	4,508,999	414,589
82,931	3,980,059	176,851	4,156,910	292,239
1,081,547	329,998,107	35,450,054	365,448,161	32,768,665

NORTHERN ONTARIO

FIXED

Statement Showing Changes during

Property	In		
	Balance January 1, 1959	Changes	
		Placed in service	Equipment relocated and reclassified
<b>Administrative and Service Buildings and Equipment</b>	\$	\$	\$
BUILDINGS.....	1,973,428	228,620	.....
OFFICE AND SERVICE EQUIPMENT.....	681,799	106,395	.....
Total administrative and service buildings and equipment.....	2,655,227	335,015	.....
<b>Rural Power District</b>	35,953,758	3,223,169	21,797
Total fixed assets.....	345,001,457	28,223,569	.....

Changes in Assets under Construction during 1959

Under construction at January 1, 1959.....	\$ 27,830,288
Expenditures during 1959.....	36,356,795
	\$ 64,187,083
Less—Placed in service during 1959.....	28,223,569
Under construction at December 31, 1959.....	\$ 35,963,514



## PROPERTIES

## ASSETS

## Year 1959 and Balances at December 31, 1959

service				
during year				
Sales and retirements	Balance December 31, 1959	Under construction December 31, 1959	Total fixed assets December 31, 1959	Expenditures during 1959
\$	\$	\$	\$	\$
2,863	2,199,185	202,107	2,401,292	229,410
26,835	761,359	.....	761,359	106,395
29,698	2,960,544	202,107	3,162,651	335,805
330,751	38,824,379	311,353	39,135,732	3,252,325
1,441,996	371,783,030	35,963,514	407,746,544	36,356,795

## Summary of Sales and Retirements during 1959

Charged to operations.....	\$ 25,257
Charged to frequency standardization.....	13,328
Charged to accumulated depreciation.....	1,290,533
Proceeds from sales.....	112,878
	<u>\$ 1,441,996</u>

NORTHERN ONTARIO

Accumulated Depreciation, December 31, 1959

	Power System	Rural Power District	Administrative and service buildings and equipment	Total
Balances at January 1, 1959..	\$ 34,549,495	\$ 6,168,100	\$ 550,191	\$ 41,267,786
Add:				
Interest at 3% per annum on accumulated depreciation on plant not fully depre- ciated.....	943,135	183,120	8,228	1,134,483
Provision in the year				
—direct.....	2,760,623	1,040,507		3,801,130
—indirect.....	57		84,667	84,724
Transfer from reserve for stabilization of rates and contingencies (Note)....	817,513			817,513
Salvage recoveries less re- moval costs of assets re- tired.....	38,049	43,950		81,999
Adjustments re transfer of equipment.....	10,331	10,331		
Other adjustments.....	112,822	1,388		114,210
	39,232,025	7,426,734	643,086	47,301,845
Deduct:				
Cost of fixed assets retired less proceeds from sales...	1,007,831	273,517	9,185	1,290,533
Balances at December 31, 1959	38,224,194	7,153,217	633,901	46,011,312

NOTE—The transfer of \$817,513 consists of (1) a retroactive adjustment of \$344,513 to reflect revised estimated service lives for older generating stations purchased by the Commission in prior years, and (2) an appropriation of \$473,000 to eliminate a deficiency in the accumulated depreciation on power system facilities arising from revisions of asset lives and changes in life classes made in prior years.

Frequency Standardization Account, December 31, 1959

	\$	\$
Balance at debit at January 1, 1959.....		3,739,640
Expenditures for frequency standardization work completed during year..	62,205	
Less industrial customers' contributions.....	72	
		62,133
		3,801,773
Less portion of cost charged to cost of power for the year.....		218,114
Balance at debit at December 31, 1959.....		3,583,659

Exchange Discount and Premium on Funded Debt, December 31, 1959

	Discount	Premium	Net discount or premium
	\$	\$	\$
Exchange discount and premium on funded debt issued in United States funds:			
Balances at January 1, 1959.....	164,093	176,489	12,396
Add discount on \$18,000,000 issued February 1, 1959.....	547,563		547,563
Balances at December 31, 1959.....	711,656	176,489	535,167

## PROPERTIES

## Reserve for Stabilization of Rates and Contingencies, December 31, 1959

	Power System	Rural Power District	Sub-total	Nuclear research	Total
Balances at January 1, 1959.....	\$ 19,705,536	\$ 308,338	\$ 20,013,874	\$ 422,047	\$ 20,435,921
Add:					
Interest for year on reserve balances (Note 1).....	755,039	12,328	767,367	12,765	780,132
Provision in the year.....				94,935	94,935
Profit on redemption of funded debt and sale of investments, net.....	89,874		89,874		89,874
	20,550,449	320,666	20,871,115	529,747	21,400,862
Deduct:					
Expenditures during year.....				452,781	452,781
Withdrawal in the year applied in reduction of cost of power to:					
—all customers in Northern Ontario Properties.....	903,685		903,685		903,685
—cost-contract municipalities formerly in the Thunder Bay System.....	297,324		297,324		297,324
Transfer to accumulated depreciation (Note 2).....	817,513		817,513		817,513
Balances at December 31, 1959 (Note 3).....	18,531,927	320,666	18,852,593	76,966	18,929,559

NOTE 1—Interest was calculated at a rate approximating the actual earnings on the investments held for the reserves.

NOTE 2—The transfer of \$817,513 consists of (1) a retroactive adjustment of \$344,513 to reflect revised estimated service lives for older generating stations purchased by the Commission in prior years, and (2) an appropriation of \$473,000 to eliminate a deficiency in the accumulated depreciation on power system facilities arising from revisions of asset lives and changes in life classes made in prior years.

NOTE 3—The balance of \$18,531,927 at the credit of the Power System reserve at December 31, 1959 includes an amount of \$2,111,558 held specifically for the benefit of those municipalities which were supplied with power at cost in the former Thunder Bay System at January 1, 1952, the date on which that system was merged with the Northern Ontario Properties.

## Sinking Fund Reserve, December 31, 1959

	Province of Ontario			Municipalities supplied with power at cost	
	40-year basis	Prepaid sinking funds	Total	40-year basis	Total
Balances at January 1, 1959...	\$ 32,742,672	\$ 13,104,234	\$ 45,846,906	\$ 12,375,490	\$ 58,222,396
Add:					
Interest at 4% per annum on reserve balances.....	1,309,707	524,169	1,833,876	495,019	2,328,895
Provision in the year					
—direct.....	3,175,069		3,175,069	405,136	3,580,205
—indirect.....	23,043		23,043		23,043
	37,250,491	13,628,403	50,878,894	13,275,645	64,154,539
Deduct credits resulting from prepaid and matured sinking funds (see note):					
Interest.....	15,513	524,169	539,682		539,682
Principal.....	4,084	178,037	182,121		182,121
	19,597	702,206	721,803		721,803
Balances at December 31, 1959	37,230,894	12,926,197	50,157,091	13,275,645	63,432,736

NOTE: The matured sinking funds at January 1, 1959 amounted to \$387,826.



NORTHERN ONTARIO  
STATEMENT OF THE ALLOCATION  
for the Year

Municipalities supplied with power at cost	Power and energy supplied during year (principal bases of cost allocation)		Cost of		
	Average of monthly peak loads	Energy	Power purchased, operating costs, and fixed charges (Note 1)	Frequency standardi- zation (Note 2)	Provision for nuclear research (Note 3)
	kw	megawatt hours	\$	\$	\$
Atikokan Twp.....	3,736.6	21,398.0	170,024.65		377.63
Cache Bay.....	257.0	634.7	9,174.94		18.63
Capreol.....	544.1	2,723.2	22,356.17		50.60
Cochrane.....	882.7	4,701.8	30,204.81		84.38
Dryden.....	2,058.1	12,921.0	96,461.81		217.62
Fort William.....	32,056.7	204,216.0	1,227,738.46		3,414.65
Kapuskasing.....	1,498.7	6,908.6	53,695.92		134.58
Larder Lake Twp.....	278.6	1,441.2	12,404.95		26.28
Latchford.....	38.3	201.6	1,672.49		3.64
McGarry.....	310.0	1,431.8	12,284.56		27.86
Nipigon Twp.....	1,502.9	8,152.0	58,910.69		148.03
North Bay.....	5,761.1	30,834.5	217,250.29		551.91
Port Arthur.....	37,687.4	198,068.8	1,359,458.26		3,658.31
Red Rock.....	797.1	4,111.2	28,935.59		76.71
Schreiber Twp.....	1,082.2	5,652.0	37,113.79		104.76
Sturgeon Falls.....	872.0	4,409.7	34,530.03		81.45
Terrace Bay.....	1,204.7	7,105.6	42,122.65		123.50
Thessalon.....	226.1	1,195.0	9,866.18		21.56
Total—Municipalities.....	90,794.3	516,106.7	3,424,206.24		9,122.10
Province of Ontario:					
Rural Power District.....	64,263.3	344,454.3	6,749,412.22	31,425.65	6,188.67
Other customers.....	748,628.2	4,885,867.2	30,223,027.52	374,314.10	79,624.32
Secondary customers (Note 1).....		544,889.3			
Total—Province of Ontario.....	812,891.5	5,775,210.8	36,972,439.74	405,739.75	85,812.99
GRAND TOTAL.....	903,685.8	6,291,317.5	40,396,645.98	405,739.75	94,935.09

Notes on Summary of the Allocation of the Cost of Primary Power

NORTHERN ONTARIO PROPERTIES

1. The total of \$40,396,645 shown under the heading "Power purchased, operating costs, and fixed charges" includes the following items of cost shown in the Statement of Operations:

Cost of power purchased.....	\$ 572,723
Operation, maintenance and administrative expenses.....	15,219,846
Interest.....	13,118,976
Depreciation.....	3,801,130
Sinking fund provision.....	3,580,205
Interchange of power with Southern Ontario System (1,518,561 megawatt-hours).....	5,028,044
Sale of secondary energy.....	924,279
	<u>\$ 40,396,645</u>

The method used in 1958 of allocating the cost of power supplied to each customer was followed in 1959 except that high-voltage transmission costs in the Thunder Bay District of the North-western Division were allocated in total on a demand basis in 1959, whereas in 1958 these costs were segregated between mining and other areas and allocated on a kilowatt-mile basis.

## PROPERTIES

## OF THE COST OF PRIMARY POWER

Ended December 31, 1959

primary power			Amounts billed for primary power (municipalities at interim rates)	Balance credited or charged	Annual rates on a kilowatt basis	
Credit resulting from prepaid and matured sinking fund	Withdrawal from stabilization of rates reserve (Note 4)	Total cost of primary power			Interim	Actual
\$	\$	\$	\$	\$	\$	\$
.....	3,736.60	166,665.68	158,206.42	8,459.26	42.34	44.60
.....	257.00	8,936.57	10,794.00	1,857.43	42.00	34.77
.....	544.10	21,862.67	23,706.08	1,843.41	43.57	40.18
.....	882.70	29,406.49	32,661.44	3,254.95	37.00	33.31
.....	2,058.10	94,621.33	91,498.13	3,123.20	44.46	45.98
.....	160,283.50	1,070,869.61	1,073,898.35	3,028.74	33.50	33.41
.....	1,498.70	52,331.80	53,952.00	1,620.20	36.00	34.92
.....	278.60	12,152.63	12,260.23	107.60	44.00	43.62
.....	38.30	1,637.83	1,646.19	8.36	43.00	42.76
.....	310.00	12,002.42	13,327.85	1,325.43	43.00	38.72
.....	7,514.50	51,544.22	51,849.20	304.98	34.50	34.30
.....	5,761.10	212,041.10	221,800.42	9,759.32	38.50	36.81
.....	188,437.00	1,174,679.57	1,187,153.12	12,473.55	31.50	31.17
.....	3,985.50	25,026.80	25,586.39	559.59	32.10	31.40
.....	5,411.00	31,807.55	35,712.90	3,905.35	33.00	29.39
.....	872.00	33,739.48	35,750.97	2,011.49	41.00	38.69
.....	6,023.50	36,222.65	39,755.67	3,533.02	33.00	30.07
.....	226.10	9,661.64	10,511.34	849.70	46.50	42.73
.....	388,118.30	3,045,210.04	3,080,070.70	34,860.66	....	....
.....	64,263.30	6,722,763.24	6,350,726.11	372,037.13	....	....
721,803.28	748,628.20	29,206,534.46	29,284,720.79	78,186.33	....	....
721,803.28	812,891.50	35,929,297.70	35,635,446.90	293,850.80	....	....
721,803.28	1,201,009.80	38,974,507.74	38,715,517.60	258,990.14	....	....

2. Frequency standardization costs are shown in the Statement of Operations as follows:

Interest.....	\$ 187,625
Portion of cost written off.....	218,114
	<u>\$ 405,739</u>

This represents a charge of 50 cents per kilowatt on the average monthly peak load supplied to all customers served on behalf of the Province of Ontario.

3. The provision of \$94,935 for nuclear research was charged to all customers in the Northern Ontario Properties on the basis of 50 per cent on the quantity of energy supplied and 50 per cent on average monthly peak loads. It represents the Northern Ontario Properties' share of a total provision of \$500,000 charged proportionally on the basis of the average monthly peak loads in the Southern Ontario System and the Northern Ontario Properties.

4. The withdrawal of \$1,201,009 from the stabilization of rates reserve is equivalent to \$1 per kilowatt on the average monthly peak load of all customers and \$4 per kilowatt on the average monthly peak load of cost-contract municipalities formerly served by the Thunder Bay System. The amount represented by the latter was charged to that portion of the reserve held specifically for those municipalities.

## NORTHERN ONTARIO PROPERTIES

## STATEMENT OF SINKING FUND EQUITY

as at December 31, 1959

Municipality	Net amount paid as part of cost of power by each municipality and other sinking funds provided out of revenues of the system and interest allowed		
	Balance January 1, 1959	Net provision and interest credited during year	Balance December 31, 1959
	\$	\$	\$
Atikokan Twp.....	36,515.94	22,013.68	58,529.62
Cache Bay.....		652.35	652.35
Capreol.....		1,553.64	1,553.64
Cochrane.....		1,933.95	1,933.95
Dryden.....	47,233.08	13,543.42	60,776.50
Fort William.....	4,225,626.68	324,594.38	4,550,221.06
Kapuskasing.....		3,556.04	3,556.04
Larder Lake Twp.....		878.33	878.33
Latchford.....		112.52	112.52
McGarry.....		848.50	848.50
Nipigon Twp.....	79,593.61	10,422.21	90,015.82
North Bay.....		14,385.41	14,385.41
Port Arthur.....	7,860,431.49	484,615.32	8,345,046.81
Red Rock.....	29,074.19	4,495.44	33,569.63
Schreiber Twp.....	35,917.36	5,903.71	41,821.07
Sturgeon Falls.....		2,338.16	2,338.16
Terrace Bay.....	61,097.52	7,606.64	68,704.16
Thessalon.....		702.30	702.30
Total—Municipalities...	12,375,489.87	900,156.00	13,275,645.87
Province of Ontario.....	45,846,905.84	4,310,184.55	50,157,090.39
GRAND TOTAL.....	58,222,395.71	5,210,340.55 (see note)	63,432,736.26

NOTE: The net provision and interest credited during the year consist of the following amounts shown in the statement of the sinking fund reserve:

Interest.....	\$ 2,328,895.83
Provision—direct.....	3,580,225.00
—indirect.....	23,023.00
	\$ 5,932,143.83
Less credits resulting from prepaid and matured sinking fund....	721,803.28
	\$ 5,210,340.55



## APPENDIX III—RURAL

**P**OWER is delivered in wholesale quantities by the Commission to 102 rural operating areas in the Rural Power District. Within the areas, retail customers are supplied under the following six classes of service: farm, hamlet residential, rural residential, commercial, summer, and industrial power. The description of these classes of service and the rates applicable to them at December 31, 1959 are included in this appendix.

### **Description of Main Classes of Service**

Farm service means service rendered to a property used for the production of food or industrial crops. It provides for the electrical supply of all farm buildings and equipment located on a farm and used for farm purposes, including equipment required for processing the products of that farm. Service may be supplied under one farm contract to all dwellings or separate domestic establishments located on the farm and occupied by persons engaged in its operation. Additional dwellings or domestic establishments located on a farm property and occupied by persons otherwise engaged are classed as residential service. Small properties of thirty acres and less are classified as residential service unless special circumstances warrant a classification as farm service.

Hamlet residential service is supplied to all domestic establishments in built-up areas where there are six or more customers in any quarter-mile section of road or street.

Rural residential service is supplied to isolated domestic establishments served as part of a rural operating area.

Commercial service applies to a wide variety of business or community establishments such as hotels, offices, stores, churches, schools, or small manufacturing and processing plants. Sign and display lighting is included.

Summer service is applicable to residential properties normally used only during the summer months.

Industrial power service is 3-phase service to such power users as creameries, cheese factories, chopping mills, and other industrial establishments.

## Rural Power District

## INVESTMENT IN FIXED ASSETS AT COST AS AT DECEMBER 31, 1959

System and Region	1958	1959	Net increase
<b>SOUTHERN ONTARIO SYSTEM</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Western .....	37,503,542	39,123,953	1,620,411
West Central .....	30,663,985	31,924,188	1,260,203
Niagara .....	9,777,200	10,469,739	692,539
Toronto .....	14,139,167	15,093,778	954,611
Georgian Bay .....	43,787,932	46,588,423	2,800,491
East Central .....	35,962,253	38,540,378	2,578,125
Eastern .....	30,838,513	33,067,643	2,229,130
Total .....	202,672,592	214,808,102	12,135,510
<b>NORTHERN ONTARIO PROPERTIES</b>			
Northeastern .....	25,674,525	27,765,133	2,090,608
Northwestern .....	10,561,430	11,370,599	809,169
Total .....	36,235,955	39,135,732	2,899,777
Total—All systems .....	238,908,547	253,943,834	15,035,287
Provincial assistance .....	113,538,494	114,862,748	1,324,254

## Rural Rate Structure

Rural rates in effect throughout the Province are given in the accompanying tables. They are quoted on a monthly basis, except for summer service, which is quoted on an annual basis. Each contract within each class of service has a rating, and the energy used is billed on the basis of a three-step energy rate, except hamlet residential service which has a four-step energy rate, the bill being subject to a monthly minimum, or with respect to summer service, to an annual fixed charge. The number of kilowatt-hours billed at the first and second energy rates and the amount of the minimum monthly bill, or the annual fixed charge, depend on the contract rating. For all contracts with a demand rating (FD, CD, and Industrial Power) these aspects of the bill are based on measured demand and are subject to minima related to demands established in previous billing periods.

For industrial power service there are eight different schedules. These are numbered in the following table. The alphabetical list of the 102 rural operating areas on page 174 indicates the schedule number of the power service rate applicable to each area, as at December 31, 1959.

## Rural Power District

## RATES AND TYPICAL BILLS FOR ELECTRICAL SERVICE

as at December 31, 1959

Rates are quoted on a monthly basis for all services except summer service, which are quoted on an annual basis. All are subject to 10% prompt payment discount.

Class and rating	Number of kilowatt-hours per month billed at uniform kwh rate shown				Minimum bill per month (gross)	Net monthly bill for		
	4.5¢	2.6¢	1.1¢	1.5¢		100 kwh	300 kwh	500 kwh
<b>Farm</b>					\$	\$	\$	\$
F35.....	60	180	....	All additional	2.25	3.37	7.45	10.15
F50.....	100	300	....	"	3.75	4.05	8.73	12.42
FD.....	10*	30*	....	"	0.40*	....	8.73†	12.42†
<b>Hamlet</b>								
<b>Residential</b>								
H20 (see note)....	60	80	500	All additional	1.67	3.37	5.89	7.87
H35.....	60	180	500	"	2.25	3.37	7.24	9.22
<b>Rural</b>								
<b>Residential</b>								
R20 (see note)....	60	80	....	All additional	1.67	3.37	6.46	9.16
R35.....	60	180	....	"	2.25	3.37	7.45	10.15
<b>Commercial</b>								
C20 (see note)....	60	120	....	All additional	1.50	3.37	6.86	9.56
C35.....	90	180	....	"	2.25	3.88	8.26	10.96
C50.....	150	300	....	"	3.75	4.05	9.58	13.77
CD.....	15*	30*	....	"	0.40*	....	9.58†	13.77†
<b>Summer</b>								
S20 (see note)....	150§	450§	....	All additional	16.67‡	4.05§	9.58§	14.26§
S35.....	225§	675§	....	"	22.22‡	4.05§	10.87§	15.55§

§ On annual basis

\*Per kw of demand

† Gross annual fixed charge

‡ Calculated on basis of minimum demand of 10 kw

NOTE—The H20, R20, C20, and S20 rates were discontinued as of January 1, 1959 except for existing 2-wire services at that date.

## Industrial Power

Schedule	No. of kwh in first block	No. of kwh in second block	Demand rate per kw	Energy rate per kwh for			Net monthly bill for use of 1 kw of demand		
				First block of kwh	Second block of kwh	All additional kwh	100 hours	200 hours	300 hours
			\$	¢	¢	¢	\$	\$	\$
1.....	50*	50*	1.35	2.3	1.5	0.33	2.92	3.22	3.52
2.....	50*	50*	1.35	2.6	1.7	0.33	3.15	3.45	3.74
3.....	50*	50*	1.35	2.8	1.8	0.33	3.28	3.58	3.88
4.....	50*	50*	1.35	3.1	2.0	0.33	3.51	3.81	4.10
5.....	50*	50*	1.35	3.4	2.2	0.33	3.73	4.03	4.33
6.....	50*	50*	1.35	3.7	2.4	0.33	3.96	4.26	4.55
7.....	50*	50*	1.35	4.0	2.6	0.33	4.18	4.48	4.78
8.....	50*	50*	1.35	4.6	3.0	0.33	4.63	4.93	5.23

\* Per kw of demand



**Rural Operating Areas**  
**and**  
**Industrial Power Service Schedules in Effect**

Rural operating area	Schedule	Rural operating area	Schedule	Rural operating area	Schedule
Algoma . . . . .	8	Harrow . . . . .	6	Peterborough . . . . .	1
Alliston . . . . .	5	Huntsville . . . . .	5	Picton . . . . .	5
Arnprior . . . . .	4	Ingersoll . . . . .	4	Plantagenet . . . . .	4
Aylmer . . . . .	5	Kapuskasing . . . . .	6	Port Arthur . . . . .	5
Bala . . . . .	4	Kenora . . . . .	8	Richmond Hill . . . . .	4
Bancroft . . . . .	7	Kingston . . . . .	4	Ridgetown . . . . .	6
Barrie . . . . .	5	Kingsville . . . . .	5	St. Catharines . . . . .	3
Beamsville . . . . .	4	Kirkland Lake . . . . .	6	St. Thomas . . . . .	5
Belleville . . . . .	4	Kitchener . . . . .	4	Sarnia . . . . .	5
Blenheim . . . . .	5	Lakefield . . . . .	4	Shelburne . . . . .	5
Bowmanville . . . . .	4	Lancaster . . . . .	4	Simcoe . . . . .	4
Bracebridge . . . . .	4	Listowel . . . . .	4	Sioux Lookout . . . . .	8
Brampton . . . . .	4	London . . . . .	4	Stayner . . . . .	4
Brantford . . . . .	4	Lucan . . . . .	5	Stoney Creek . . . . .	2
Brockville . . . . .	4	Manitoulin . . . . .	8	Caledonia Section . . . . .	4
Cannington . . . . .	5	Markdale . . . . .	4	Stratford . . . . .	4
Cayuga . . . . .	6	Markham . . . . .	4	Strathroy . . . . .	5
Chatham . . . . .	4	Matheson . . . . .	6	Sudbury . . . . .	6
Clinton . . . . .	5	Merlin . . . . .	6	Sutton . . . . .	5
Cobden . . . . .	4	Merrickville . . . . .	4	Terrace Bay . . . . .	7
Cobourg . . . . .	4	Minden . . . . .	6	Tillsonburg . . . . .	4
Delta . . . . .	4	Mitchell . . . . .	5	Tweed . . . . .	5
Dorchester . . . . .	5	Napanee . . . . .	4	Uxbridge . . . . .	5
Dryden . . . . .	8	New Liskeard . . . . .	6	Vankleek Hill . . . . .	4
Dundas . . . . .	4	North Bay . . . . .	6	Walkerton . . . . .	5
Dunnville . . . . .	5	Norwood . . . . .	5	Wallaceburg . . . . .	5
Elmira . . . . .	4	Oil Springs . . . . .	6	Warren . . . . .	6
Essex . . . . .	6	Orangeville . . . . .	6	Welland . . . . .	1
Exeter . . . . .	5	Orillia . . . . .	3	West Lorne . . . . .	6
Fenelon Falls . . . . .	5	Oshawa . . . . .	4	Winchester . . . . .	4
Forest . . . . .	6	Ottawa . . . . .	2	Wingham . . . . .	5
Fort Frances . . . . .	8	Owen Sound . . . . .	5	Woodbridge . . . . .	5
Frankford . . . . .	4	Parry Sound . . . . .	5	Woodstock . . . . .	4
Geraldton . . . . .	8	Penetanguishene . . . . .	5		
Guelph . . . . .	4	Perth . . . . .	4		

**Rural Power District**  
**MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1959**

Rural operating areas by regions	Miles of primary line	Number of customers							Total
		Farm	Residential		Com- mercial	Summer		Power	
			Rural	Hamlet		Com- mercial	Other		
SOUTHERN ONTARIO SYSTEM									
WESTERN									
Aylmer . . . . .	335.64	1,595	201	984	234	10	136	8	3,168
Blenheim . . . . .	141.72	656	142	422	111	14	252	10	1,607
Chatham . . . . .	310.50	1,361	341	923	224			10	2,859
Dorchester . . . . .	206.98	848	172	793	173		2	16	2,004
Essex . . . . .	380.82	1,818	243	2,126	303	11	636	31	5,168
Exeter . . . . .	273.26	1,209	53	336	140	11	490	13	2,252
Forest . . . . .	338.94	1,404	80	230	140	45	1,010	6	2,915
Harrow . . . . .	249.02	1,387	113	1,225	181	23	1,479	26	4,434
Ingersoll . . . . .	301.60	1,074	102	422	112	3	31	5	1,749
Kingsville . . . . .	291.26	1,851	100	1,620	310	60	1,280	46	5,267
London . . . . .	402.49	1,171	202	14,188	960		33	151	16,705
Lucan . . . . .	378.97	1,441	71	159	114			7	1,792
Merlin . . . . .	395.18	1,628	182	421	240	3	388	19	2,881
Oil Springs . . . . .	361.30	1,479	65	249	203			26	2,022
Ridgetown . . . . .	369.74	1,417	159	477	199	27	638	11	2,928
St. Thomas . . . . .	314.27	1,228	236	1,943	267		13	12	3,699
Sarnia . . . . .	287.13	1,198	144	2,572	350	8	500	15	4,787
Strathroy . . . . .	518.80	1,960	236	690	273			10	3,169
Tillsonburg . . . . .	462.68	1,953	377	1,098	328			28	3,784
Wallaceburg . . . . .	465.63	1,801	310	1,314	343	1	363	21	4,153
West Lorne . . . . .	500.59	1,820	104	270	207		64	14	2,479
Woodstock . . . . .	226.89	891	73	775	179	1		13	1,932
Total . . . . .	7,513.41	31,190	3,706	33,237	5,591	217	7,315	498	81,754
WEST CENTRAL									
Brantford . . . . .	556.30	2,223	450	864	333	4	13	7	3,894
Cayuga . . . . .	529.19	1,977	271	818	279	21	1,517	26	4,909
Clinton . . . . .	666.72	2,565	126	830	347	6	820	10	4,704
Dundas . . . . .	385.03	1,784	280	4,186	354		3	38	6,645
Elmira . . . . .	495.76	1,670	200	1,164	288	13	264	22	3,621
Guelph . . . . .	391.95	1,350	272	1,436	228		16	13	3,315
Kitchener . . . . .	482.99	1,686	285	2,336	427	1	176	45	4,956
Listowel . . . . .	622.40	2,636	103	609	328	2	15	13	3,706
Mitchell . . . . .	554.12	2,417	103	580	250			16	3,366
Simcoe . . . . .	798.04	3,446	875	2,348	510	47	1,608	19	8,853
Stoney Creek . . . . .	313.11	1,105	220	6,495	564	1	138	61	8,584
Stratford . . . . .	302.67	1,286	114	623	191			12	2,226
Total . . . . .	6,098.28	24,145	3,299	22,289	4,099	95	4,570	282	58,779

**Rural Power District**  
**MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1959**

Rural operating areas by regions	Miles of primary line	Number of customers							
		Farm	Residential		Com-mercial	Summer		Power	Total
			Rural	Hamlet		Com-mercial	Other		
SOUTHERN ONTARIO SYSTEM —Continued									
NIAGARA									
Beamsville . . . . .	374.31	2,101	257	2,290	397	76	45	5,166	
Dunnville . . . . .	278.45	1,085	251	696	250	45	1,214	3,558	
St. Catharines . . .	296.51	1,505	203	10,005	712	5	247	12,760	
Welland . . . . .	471.88	1,375	482	7,569	823	31	809	11,182	
Total . . . . .	1,421.15	6,066	1,193	20,560	2,182	81	2,346	32,666	
TORONTO									
Brampton . . . . .	549.41	1,779	782	2,235	408	17	182	5,470	
Markham . . . . .	291.92	984	415	4,193	449	30	501	6,603	
Richmond Hill . . .	309.19	978	262	7,174	658	3	195	9,350	
Sutton . . . . .	349.91	1,009	285	2,885	365	102	3,256	7,921	
Woodbridge . . . . .	409.02	1,286	622	3,018	560	85	79	5,650	
Total . . . . .	1,909.45	6,036	2,366	19,505	2,440	152	4,219	34,994	
GEORGIAN BAY									
Alliston . . . . .	494.25	1,958	280	794	238	3	32	3,319	
Bala . . . . .	242.13	9	159	557	102	87	2,546	3,465	
Barrie . . . . .	511.13	1,452	503	2,481	426	81	3,687	8,652	
Bracebridge . . . . .	495.66	312	450	1,007	228	111	3,282	5,394	
Cannington . . . . .	490.23	1,210	260	879	241	36	3,068	5,706	
Huntsville . . . . .	626.22	654	533	1,301	311	156	2,714	5,683	
Markdale . . . . .	650.61	2,234	178	720	309	9	620	4,077	
Orangeville . . . . .	520.69	1,370	403	1,266	340	8	470	3,867	
Orillia . . . . .	598.80	997	438	2,287	467	115	3,879	8,200	
Owen Sound . . . . .	944.53	2,502	325	1,536	526	146	3,438	8,486	
Parry Sound . . . . .	459.77	218	441	1,033	243	123	1,452	3,524	
Penetanguishene . .	553.88	974	356	949	243	152	5,510	8,191	
Shelburne . . . . .	722.01	2,413	177	240	233	63	3,126	6,218	
Stayner . . . . .	365.50	1,183	136	1,174	253	223	3,246	4,718	
Uxbridge . . . . .	505.16	1,577	303	1,012	276	21	1,515	4,718	
Walkerton . . . . .	852.50	3,130	250	770	393	21	754	5,333	
Wingham . . . . .	701.46	2,637	77	648	334	23	776	4,503	
Total . . . . .	9,734.53	24,830	5,269	18,654	5,163	1,315	37,052	92,462	

Rural Power District  
MILES OF LINE, NUMBER OF CUSTOMERS  
as at December 31, 1959

Rural operating areas by regions	Miles of primary line	Number of customers							
		Farm	Residential		Com-mercial	Summer		Power	Total
			Rural	Hamlet		Com-mercial	Other		
SOUTHERN ONTARIO SYSTEM—Concluded									
EAST CENTRAL									
Bancroft.....	485.22	612	278	1,234	210	50	1,383	6	3,773
Belleville.....	215.75	792	185	1,256	233	3	53	14	2,536
Bowmanville...	318.90	980	246	981	225	27	102	12	2,573
Cobourg.....	594.36	1,677	461	1,380	344	71	1,033	15	4,981
Fenelon Falls...	537.76	1,050	102	783	267	148	3,529	12	5,891
Frankford.....	585.12	1,969	382	1,277	336	33	491	9	4,497
Kingston.....	857.63	2,052	529	4,299	694	28	1,579	45	9,226
Lakefield.....	438.93	549	208	642	185	91	2,909	1	4,585
Minden.....	493.65	351	297	1,312	331	140	3,512	3	5,946
Napanee.....	574.06	1,918	281	1,206	392	36	443	11	4,287
Norwood.....	387.17	932	171	357	122	30	1,231	5	2,848
Oshawa.....	282.52	855	354	2,803	334	7	190	28	4,571
Peterborough...	663.35	1,799	381	2,433	440	70	1,354	26	6,503
Picton.....	468.18	1,735	363	1,411	299	48	764	14	4,634
Tweed.....	611.16	1,144	548	770	327	110	917	3	3,819
Total.....	7,513.76	18,415	4,786	22,144	4,739	892	19,490	204	70,670
EASTERN									
Arnprior.....	433.10	1,008	187	1,080	291	42	1,386	19	4,013
Brockville.....	606.88	2,112	483	2,190	470	41	959	28	6,283
Cobden.....	1,215.89	2,492	622	3,357	796	105	1,302	32	8,706
Delta.....	466.83	1,019	232	597	260	52	1,352	4	3,516
Lancaster.....	592.51	2,247	475	1,380	438	8	363	33	4,944
Merrickville...	282.80	798	147	580	147	1	209	7	1,889
Ottawa.....	766.18	2,413	794	8,066	795	11	405	82	12,566
Perth.....	851.49	1,905	366	691	361	42	1,871	7	5,243
Plantagenet....	379.72	1,539	163	782	346	.....	94	19	2,943
Vankleek Hill...	220.34	928	88	508	187	9	86	14	1,820
Winchester.....	829.40	3,320	318	1,618	578	4	65	38	5,941
Total.....	6,645.14	19,781	3,875	20,849	4,669	315	8,092	283	57,864



**Rural Power District**  
**MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1959**

Rural operating areas by regions	Miles of primary line	Number of customers							
		Residential			Com-mercial	Summer		Power	Total
		Farm	Rural	Hamlet		Com-mercial	Other		
NORTHERN ONTARIO PROPERTIES									
NORTHEASTERN									
Algoma.....	309.82	387	191	4,118	685	39	276	74	5,770
Kapuskasing....	240.75	560	207	2,093	289	9	246	14	3,418
Kirkland Lake..	109.64	84	72	204	70	16	327	2	775
Manitoulin.....	583.61	853	253	1,420	528	74	812	27	3,967
Matheson.....	574.35	1,097	276	1,291	279	8	395	15	3,361
New Liskeard...	645.50	1,250	395	1,017	352	39	413	18	3,484
North Bay.....	807.33	1,092	755	3,336	579	129	1,296	42	7,229
Sudbury.....	624.97	820	898	11,749	1,027	8	1,284	92	15,878
Warren.....	495.69	1,006	281	1,232	393	103	796	12	3,823
Total.....	4,391.66	7,149	3,328	26,460	4,202	425	5,845	296	47,705
NORTHWESTERN									
Dryden.....	296.85	394	255	489	205	39	240	7	1,629
Fort Frances...	535.66	931	292	507	272	41	89	4	2,136
Geraldton.....	116.82	.....	14	612	205	8	14	16	869
Kenora.....	263.28	184	256	607	167	124	860	12	2,210
Port Arthur....	861.91	1,761	881	2,190	419	13	1,185	24	6,473
Sioux Lookout..	23.49	10	66	71	15	8	61	1	232
Terrace Bay....	25.16	.....	1	526	82	1	12	5	627
Total.....	2,123.17	3,280	1,765	5,002	1,365	234	2,461	69	14,176

**SUMMARY—MILES OF LINE, NUMBER OF CUSTOMERS**  
**as at December 31, 1959**

System and Region	Miles of primary line	Number of customers							
		Farm	Residential		Com- mercial	Summer		Power	Total
			Rural	Hamlet		Com- mercial	Other		
SOUTHERN ONTARIO SYSTEM									
Western . . . . .	7,513.41	31,190	3,706	33,237	5,591	217	7,315	498	81,754
West Central . . . . .	6,098.28	24,145	3,299	22,289	4,099	95	4,570	282	58,779
Niagara . . . . .	1,421.15	6,066	1,193	20,560	2,182	81	2,346	238	32,666
Toronto . . . . .	1,909.45	6,036	2,366	19,505	2,440	152	4,219	276	34,994
Georgian Bay . . . . .	9,734.53	24,830	5,269	18,654	5,163	1,315	37,052	179	92,462
East Central . . . . .	7,513.76	18,415	4,786	22,144	4,739	892	19,490	204	70,670
Eastern . . . . .	6,645.14	19,781	3,875	20,849	4,669	315	8,092	283	57,864
Total . . . . .	40,835.72	130,463	24,494	157,238	28,883	3,067	83,084	1,960	429,189
NORTHERN ONTARIO PROPERTIES									
Northeastern . . . . .	4,391.66	7,149	3,328	26,460	4,202	425	5,845	296	47,705
Northwestern . . . . .	2,123.17	3,280	1,765	5,002	1,365	234	2,461	69	14,176
Total . . . . .	6,514.83	10,429	5,093	31,462	5,567	659	8,306	365	61,881
Total—All systems	47,350.55	140,892	29,587	188,700	34,450	3,726	91,390	2,325	491,070





## Rural Electrical Service 1950 - 1959

## CUSTOMERS, REVENUE, AND CONSUMPTION, BY CLASSES OF SERVICE

Class of service	Year	Revenue	Consumption	Customers	Monthly consumption per customer	Average cost per kwh
		\$	kwh	No.	kwh	¢
<b>*Farm</b> .....	1950	7,441,437.92	400,311,511	114,725	263	1.86
	1951	8,097,710.92	408,001,270	123,434	286	1.98
	1952	9,017,321.17	465,813,826	129,451	307	1.94
	1953	11,053,487.41	507,669,118	133,522	322	2.18
	1954	12,207,502.58	558,217,490	136,013	345	2.19
	1955	12,915,852.58	593,811,741	138,648	360	2.18
	1956	13,671,336.65	642,704,082	139,289	385	2.13
	1957	14,386,097.14	685,873,991	140,604	408	2.10
	1958	15,159,553.04	739,105,332	140,343	439	2.05
	1959	16,122,453.84	804,044,121	140,892	477	2.01
<b>*Hamlet &amp; Rural Residential</b> .....	1950	5,712,108.72	297,210,028	115,464	199	1.92
	1951	6,380,808.20	308,065,399	124,091	214	2.07
	1952	7,253,640.00	359,033,745	133,193	233	2.02
	1953	9,560,018.46	421,976,886	150,627	248	2.27
	1954	11,194,393.02	497,941,047	160,552	267	2.25
	1955	12,734,130.77	577,738,311	177,398	285	2.20
	1956	14,639,910.88	689,671,299	181,113	321	2.12
	1957	16,174,554.38	780,555,465	196,025	345	2.07
	1958	17,732,046.03	905,276,590	207,570	374	1.96
	1959	18,862,773.02	988,315,209	218,287	387	1.91
<b>*Commercial</b> ..... (Including Summer Commercial)	1950	2,083,696.71	112,760,186	17,879	482	1.85
	1951	2,284,851.74	114,818,736	20,110	504	1.99
	1952	2,457,032.13	125,448,544	24,564	468	1.96
	1953	3,385,239.46	148,684,777	28,870	464	2.28
	1954	3,707,824.28	165,641,656	30,403	466	2.24
	1955	3,996,936.76	186,152,293	32,509	493	2.15
	1956	4,444,185.15	210,438,942	33,481	532	2.11
	1957	4,855,540.79	232,393,971	35,179	564	2.09
	1958	5,346,040.16	259,521,563	36,966	600	2.06
	1959	5,764,611.07	282,562,584	38,176	627	2.04
<b>*Summer</b> .....	1950	1,376,606.36	32,137,220	43,733	66	4.28
	1951	1,616,368.92	36,502,195	49,913	65	4.43
	1952	1,826,359.64	40,160,959	55,159	64	4.55
	1953	1,833,881.12	34,136,058	57,547	51	5.37
	1954	2,034,199.00	38,459,711	62,183	54	5.29
	1955	2,214,360.48	40,375,690	68,600	51	5.48
	1956	2,478,450.51	45,989,565	74,390	54	5.39
	1957	2,709,831.47	50,673,331	79,792	55	5.35
	1958	2,943,051.21	55,170,379	85,611	56	5.33
	1959	3,170,306.65	60,345,721	91,390	57	5.25
<b>Power</b> .....	1950	1,429,465.54	87,983,478	1,010	6,433	1.62
	1951	1,562,608.29	87,692,082	1,058	7,067	1.78
	1952	1,799,924.89	102,608,301	1,170	7,676	1.75
	1953	2,147,899.48	121,310,479	1,289	8,222	1.77
	1954	2,545,737.21	148,176,508	1,466	8,964	1.72
	1955	2,934,852.81	171,202,169	1,681	9,067	1.71
	1956	3,402,416.31	207,252,224	1,782	9,975	1.64
	1957	3,732,252.41	225,748,793	2,011	9,920	1.65
	1958	4,410,317.84	278,005,882	2,113	11,235	1.59
	1959	4,612,172.64	287,458,107	2,325	10,795	1.60

\* In 1959, consumption for flat-rate water-heaters was estimated on the basis of 16.8 hours' daily use instead of 20 hours' daily use as in the past. The data for previous years have been adjusted to the new basis.





## APPENDIX IV—LEGISLATIVE

**A**T the 1959 Session of the Legislative Assembly of the Province of Ontario one Act respecting The Hydro-Electric Power Commission of Ontario was passed. The said Act is reproduced here in full. The short title of the Act is as follows:

*The Power Commission Amendment Act, 1959, Chapter 73.*

### ACT

### CHAPTER 73

### An Act to amend The Power Commission Act

*Assented to March 26th, 1959.*

*Session Prorogued March 26th, 1959.*

**H**ER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

**1.**—(1) Section 45a of *The Power Commission Act*, as enacted by R.S.O. 1950, c. 281, s. 45a section 5 of *The Power Commission Amendment Act, 1952* and amended (1952, c. 77, s. 5), by section 2 of *The Power Commission Amendment Act, 1953* and amended

section 1 of *The Power Commission Amendment Act, 1958*, is further amended by adding thereto the following subsection:

Idem

- (2a) In addition to the amounts payable under subsection 2, the Commission shall pay in each year to any municipality in which are situated generating station buildings or transformer station buildings owned by and vested in the Commission the total amount that all rates except, subject to subsections 3 and 4, rates on business assessment, levied in that municipality for taxation purposes would produce based on an assessed value of such buildings to be determined on the basis of \$2 for each square foot of inside ground floor area of the actual buildings housing the generating, transforming and auxiliary equipment and machinery multiplied by the equalization factor used in that year by the Department of Municipal Affairs.

R.S.O. 1950,  
c. 281, s. 45a  
subs. 3  
(1958, c. 80,  
s. 1),  
re-enacted

- (2) Subsection 3 of the said section 45a, as re-enacted by section 1 of *The Power Commission Amendment Act, 1958*, is repealed and the following substituted therefor:

Idem

- (3) The Commission shall also pay the amount that the current rates for business assessment levied on assessment on,

(a) lands owned by and vested in the Commission;

(b) buildings used exclusively for executive and administrative purposes and owned by and vested in the Commission; and

(c) generating station buildings and transformer station buildings owned by and vested in the Commission,

would produce, based on 60 per cent of the assessed value of such land and buildings as calculated and determined under subsections 2 and 2a.

R.S.O. 1950,  
c. 281, s. 45a  
(1952, c. 77,  
s. 5),  
amended

- (3) The said section 45a is further amended by adding thereto the following subsection:

Limitation

- (4a) Notwithstanding subsections 2, 2a, 3 and 4, the total amount payable thereunder by the Commission to any municipality in any year shall not exceed 50 per cent of the total of the amounts required for the purposes of the municipality and of all its local boards being raised by the imposition, rating and levying of all rates, assessments and taxation, except local improvement rates, upon rateable property within the municipality in that year.

(4) Subsection 5 of the said section 45*a* is amended by inserting after "2" in the first line "2*a*", so that the subsection shall read as follows: R.S.O. 1950, c. 281, s. 45*a* (1952, c. 77, s. 5), subs. 5, amended

(5) The payments received under subsections 2, 2*a*, 3 and 4 shall be credited by the municipality to the general fund of the municipality. Credit to municipal general fund

(5) Subsection 6 of the said section 45*a* is amended by inserting after "2" in the fourth line "2*a*", so that the subsection shall read as follows: R.S.O. 1950, c. 281, s. 45*a* (1952, c. 77, s. 5), subs. 6, amended

(6) The assessments and assessed values referred to in this section shall be valuations made in each year for the purposes of this section by the Department of Municipal Affairs, and subject to subsections 2, 2*a*, 3 and 12 the valuations shall be made on the same basis as real property liable for municipal taxation in the municipality. Valuation

(6) Subsection 12 of the said section 45*a*, as amended by section 2 of *The Power Commission Amendment Act, 1953*, is further amended by inserting after "2" in the fifth line and in the tenth line respectively "2*a*", so that the subsection shall read as follows: R.S.O. 1950, c. 281, s. 45*a* (1952, c. 77, s. 5), subs. 12, amended

(12) In making the valuations referred to in subsection 6, there shall be no value included for machinery whether fixed or not nor the foundation on which it rests, works, structures other than buildings referred to in subsection 2, 2*a* or 4, substructures, superstructures, rails, ties, poles, towers, lines nor any of the things excepted from exemption from taxation by paragraph 17 of section 4 of *The Assessment Act*, nor other property, works or improvements not referred to in subsection 2, 2*a* or 4, nor an easement or the right or use of occupation or other interest in land not owned by the Commission. Exemptions R.S.O. 1950, c. 24

**2.** This Act shall be deemed to have come into force on the 1st day of January, 1959. Commencement

**3.** This Act may be cited as *The Power Commission Amendment Act, 1959*. Short title



## ORDER IN COUNCIL

The agreements between The Hydro-Electric Power Commission of Ontario and municipalities and corporations mentioned in the list hereunder given were approved by Order in Council.

TOWNS	TOWNSHIP
Campbellford.....July 10, 1959	Ignace.....Oct. 6, 1959
Kapuskasing.....Aug. 10, 1959	
Sturgeon Falls.....Nov. 27, 1959	POLICE VILLAGE
	Avonmore.....July 13, 1959

## CORPORATIONS

Abino Gold Mines Limited.....	Dec. 22, 1959
Abitibi Power & Paper Company, Limited.....	Feb. 26, 1959
Atomic Energy of Canada Limited.....	Aug. 27, 1959
Avro Aircraft Limited.....	June 15, 1959
Beaver Wood Fibre Company Limited.....	Mar. 9, 1959
Canada Cement Company, Limited.....	July 7, 1959
Canadian Broadcasting Corporation.....	Jan. 12, 1959
Canadian Industries Limited.....	Mar. 12, 1959
Canadian Oil Companies, Limited.....	Aug. 17, 1959
Capital Concrete Products Limited.....	June 11, 1959
Coballoy Mines and Refiners Limited.....	Dec. 3, 1959
Consolidated Denison Mines Limited.....	Sept. 9, 1959
Consolidated Mosher Mines Limited.....	Oct. 6, 1959
Corby, H., Distillery Limited.....	Oct. 6, 1959
Deer Horn Mines Limited.....	May 25, 1959
Deloro Smelting & Refining Company, Limited.....	Jan. 22, 1959
Dominion Foundries and Steel, Limited.....	Jan. 6, 1959
Dominion Foundries and Steel, Limited.....	Aug. 28, 1959
Dominion Foundries and Steel, Limited.....	Aug. 28, 1959
Dominion Magnesium Limited.....	June 11, 1959
Dryden Paper Company, Limited.....	June 4, 1959
Du Pont Company of Canada (1956) Limited.....	Mar. 17, 1959
Ford Motor Company of Canada, Limited.....	Feb. 26, 1959
Her Majesty the Queen in right of Canada, represented by the Minister of National Defence.....	Jan. 29, 1959
Her Majesty the Queen in right of Canada, represented by the Minister of National Defence.....	Feb. 13, 1959
Her Majesty the Queen in right of the Province of Ontario, represented by the Minister of Public Works for the Province of Ontario.....	Nov. 23, 1959
International Nickel Company of Canada, Limited.....	Feb. 9, 1959
Interprovincial Pipe Line Company.....	Feb. 18, 1959
Light Alloys Limited.....	Jan. 14, 1959
Macassa Mines Limited.....	April 24, 1959
Madsen Red Lake Gold Mines Limited.....	July 10, 1959
Marmoraton Mining Company, Ltd.....	July 7, 1959
Minnesota and Ontario Paper Company, and Ontario-Minnesota Pulp and Paper Company Limited.....	July 8, 1959
Northern Electric Company, Limited.....	July 7, 1959

Northspan Uranium Mines Limited . . . . .	June 1, 1959
Northspan Uranium Mines Limited . . . . .	June 15, 1959
Ontario Water Resources Commission . . . . .	Dec. 30, 1959
Orenda Engines Limited . . . . .	Oct. 6, 1959
Ottawa Valley Crushed Stone Limited . . . . .	June 1, 1959
Patrick Harrison & Company Limited . . . . .	Nov. 13, 1959
Pembroke Electric Light Company Limited . . . . .	Jan. 7, 1959
Pembroke Electric Light Company Limited . . . . .	July 24, 1959
Port Weller Dry Docks Limited . . . . .	July 7, 1959
Provincial Paper Limited . . . . .	Feb. 26, 1959
Robin Hood Flour Mills Limited . . . . .	July 2, 1959
St. Lawrence Corporation Limited . . . . .	April 6, 1959
St. Lawrence Seaway Authority . . . . .	Dec. 30, 1959
Sherbrooke Metallurgical Company Limited . . . . .	Nov. 20, 1959
Siscoe Metals of Ontario Limited . . . . .	Oct. 23, 1959
Somerville Limited . . . . .	May 11, 1959
Stanleigh Uranium Mining Corporation Limited . . . . .	June 15, 1959
Strathcona Paper Company, Limited . . . . .	Aug. 6, 1959
Toronto Elevators Limited . . . . .	Mar. 3, 1959
Trans-Canada Air Lines . . . . .	May 11, 1959
Trans-Northern Pipe Line Company . . . . .	Mar. 24, 1959



## SUPPLEMENT

### MUNICIPAL ELECTRICAL SERVICE

**T**HIS supplementary section on service in the municipal systems brings together statistical information on retail service to customers served by the 354 municipal electrical utilities and the 28 Commission-owned local systems. The number of domestic, commercial, and power service customers so supplied increased by 54,572 during 1959 and at December 31 stood at 1,339,156.

The numbers in the various customer groups that contribute to this total reflect reclassifications of customers being made in conjunction with the introduction of new rate schedules. The purpose of these reclassifications is that certain power customers, for example small processing companies such as dairies and bakeries, shall be classified as commercial service, and that commercial service customers with connected loads of less than 5 kilowatts may be billed under domestic service. The table on page 188 provides some indication of the growth in domestic, commercial, and power service over a 10-year period. The statistical information relative to energy consumption and unit cost for these three main classes of service is reproduced in the graphs on page 189.

The revenues derived from street lighting are based on estimated consumption only (see table on page 116), and the revenue applicable to the municipal utilities is given in the analysis of revenue and expense that follows. In each of the operating statements of the utilities the revenue from street lighting is included in the amount shown for sales of electric energy. It can be derived for any utility by subtracting from the revenue shown in Statement "B" the sum of the revenues for the same utility shown in Statement "D".



## MUNICIPAL ELECTRICAL UTILITIES

Total revenues of the municipal utilities at \$178,086,883 were 9.6 per cent greater than revenues of \$162,424,745 in 1958. A 16.0 per cent increase in power service revenues is the major contributing factor in this growth, but other classes of service provided increases in revenue—5.9 per cent for domestic service, 6.0 per cent for commercial service, and 9.9 per cent for street lighting, in order of dollar value. These figures in part reflect transfers of certain direct industrial and rural customers of the Commission to the utilities. Revenues from the sales of electric energy as shown in the operating statements of the municipal utilities on page 243 amounted to \$175,686,813. Of this revenue, domestic service accounted for \$72,277,808 (41.1 per cent), commercial service for \$37,194,830 (21.2 per cent), power service for \$60,860,930 (34.6 per cent), and street lighting for \$5,353,245 (3.1 per cent).

## Municipal Electrical Utilities and Local Systems

## CUSTOMERS, REVENUE, AND CONSUMPTION

1950 to 1959

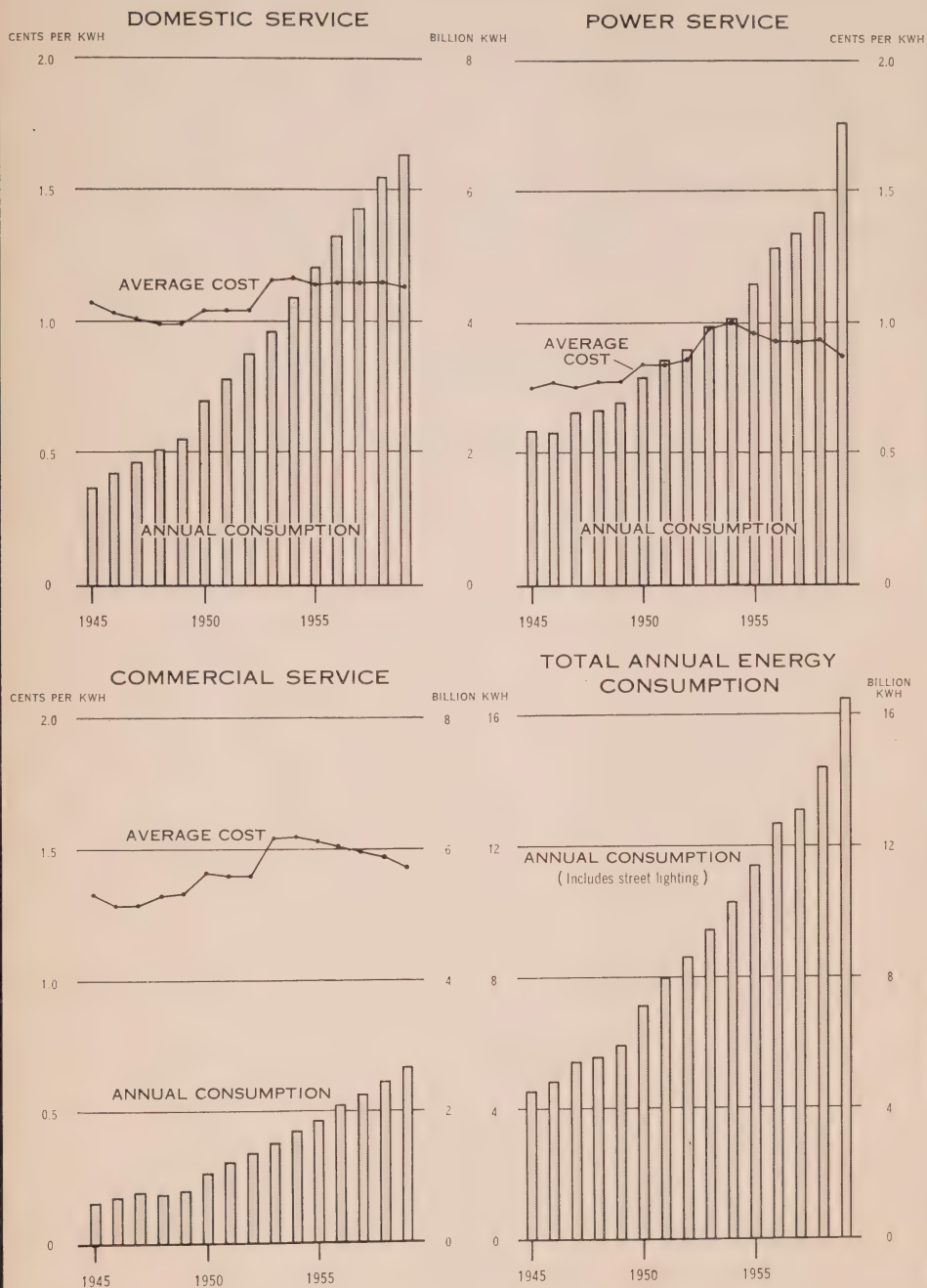
Service	Year	Revenue	Consumption	Customers	Monthly consumption per customer	Average cost per kwh
		\$	kwh	No.	kwh	¢
Domestic .....	1950	29,064,176	2,722,412,309	767,286	296	1.07
	1951	32,905,664	3,065,257,438	800,033	319	1.07
	1952	36,811,115	3,411,685,705	836,802	340	1.08
	1953	44,647,668	3,734,160,562	877,323	355	1.20
	1954	50,833,346	4,246,511,375	930,674	380	1.20
	1955	55,241,247	4,667,789,930	970,829	401	1.18
	1956	61,234,494	5,191,581,628	1,031,482	419	1.18
	1957	65,842,103	5,602,672,756	1,072,868	435	1.18
	1958	69,804,608	6,036,470,489	1,139,061	442	1.16
	1959	73,955,229	6,540,969,291	1,194,878	456	1.13
Commercial .....	1950	15,231,494	1,075,501,239	107,817	831	1.42
	1951	17,549,402	1,249,185,273	111,154	937	1.40
	1952	19,502,920	1,387,136,211	115,304	1,003	1.41
	1953	23,603,194	1,526,535,177	119,498	1,065	1.55
	1954	26,293,250	1,694,071,712	123,884	1,140	1.55
	1955	28,576,115	1,858,974,388	127,913	1,211	1.54
	1956	31,423,691	2,081,200,929	127,497*	1,360	1.51
	1957	33,901,487	2,270,913,902	124,757*	1,517	1.49
	1958	35,968,060	2,445,225,765	122,446*	1,664	1.47
	1959	38,079,501	2,669,327,226	120,733*	1,842	1.43
Power .....	1950	26,966,954	3,193,783,939	18,788	14,166	0.84
	1951	29,353,071	3,459,742,798	19,370	14,884	0.85
	1952	31,403,227	3,619,518,306	20,055	15,040	0.87
	1953	38,482,884	3,948,124,809	20,885	15,753	0.98
	1954	40,855,075	4,089,513,923	21,671	15,726	1.00
	1955	44,270,882	4,637,527,118	22,237	17,379	0.96
	1956	47,808,610	5,140,704,025	22,809	18,782	0.93
	1957	50,124,976	5,366,245,253	22,607*	19,781	0.93
	1958	52,741,979	5,651,743,390	23,077	20,409	0.93
	1959	61,167,603	7,052,152,034	23,545	24,960	0.87

\* Decrease in number of customers reflects reclassifications from commercial to domestic and from power to commercial service billing.

NOTE: Kwh consumption figures for domestic and commercial services in the above table have been revised to reflect the use of flat-rate water-heaters for a uniform average of 16.8 hours per day, instead of 20 hours as in the past.

## MUNICIPAL ELECTRICAL UTILITIES AND LOCAL SYSTEMS

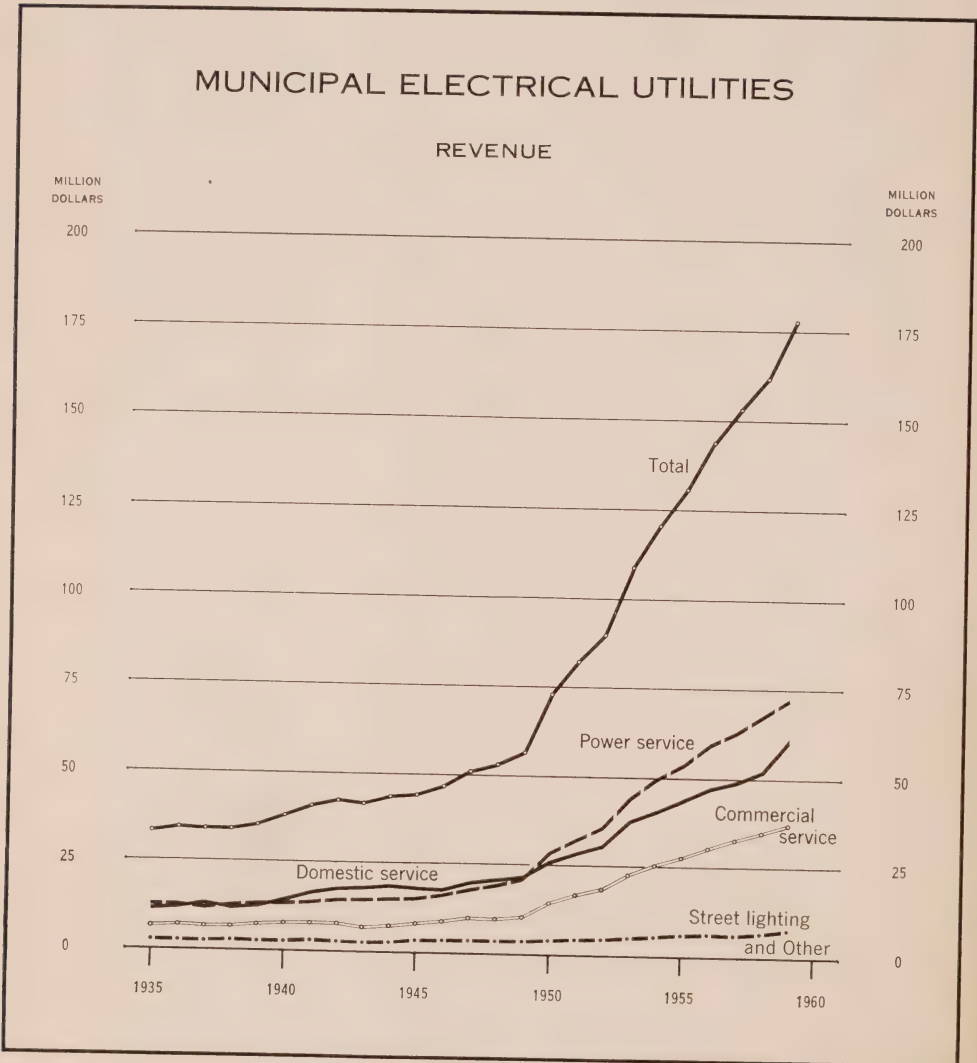
## ANNUAL ENERGY CONSUMPTION AND AVERAGE COST PER KILOWATT-HOUR



Total expenses of the utilities were \$160,581,287, an increase of 11.8 per cent over expenses of \$143,676,564 in 1958. Contributing to this increase in total expense was a 12.7 per cent increase in cost of power generated and purchased, and a 9.7 per cent increase in operation and maintenance expense. Administrative expense and fixed charges, including depreciation, each rose by 9.5 per cent. Since the increase in expense was proportionally greater than the increase in revenue, the net income for the utilities was somewhat lower than in 1958, and at \$17,505,596 was equal to 9.8 per cent of total revenue.

Summary of Financial Position

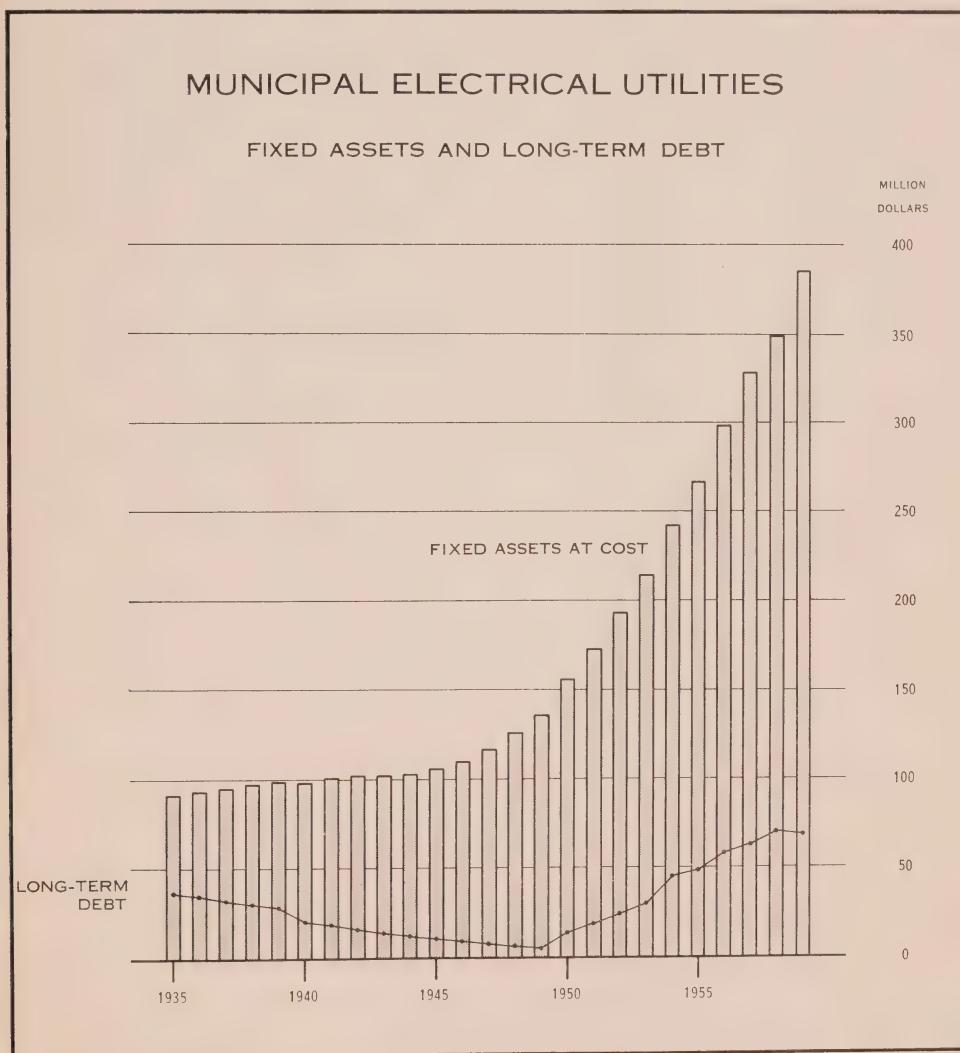
The investment of the municipal utilities in fixed assets increased during 1959 by \$35,713,145 to reach \$385,419,306. Total assets, after deducting accumulated depreciation of \$77,551,575, were \$599,610,980, which includes the \$238,790,589 equity in the Commission's systems acquired by the municipal



utilities operating under cost contracts with the Commission. This equity is the contribution made by the cost-contract municipalities as part of the payment for the cost of power, and is used for the retirement of the Commission's long-term debt. Since most of the municipal utilities close their books before the Commission's calculation of sinking fund for the year is available, their balance sheets show the equity account as it was at the end of the previous rather than the current year. Net debt, that is debentures outstanding less local sinking fund provisions, was \$68,731,000 at December 31, 1959, equivalent to 17.8 per cent of the cost of fixed assets.

### Municipal Retail Rates

Under The Power Commission Act the Commission exercises supervisory control over the activities of the municipal electrical utilities, and their rates to ultimate customers are subject to the Commission's approval. These rates





must provide the utility with sufficient revenue to meet the cost of providing service and should also distribute this cost equitably among the customers being served.

Basically revised rate structures were introduced in 1956 following studies carried out over a period of years by the Commission in conjunction with the rates committee of the Association of Municipal Electrical Utilities of Ontario. The need for revision was apparent because of radical changes that have taken place in recent years both in the requirements of customers and in the cost of providing electrical service for them. The adoption of the new rate structures will result in a more uniform application of the basic principles of rate development and will eliminate a great many anomalies and inequities that have arisen because of piecemeal changes over the years. The utilities are now changing over progressively to the new rate structures as revisions in their particular schedules become necessary.

### FINANCIAL AND OTHER STATISTICAL TABLES

Four statistical tables complete this municipal service supplement. The first two, designated "Statements A and B", and summarized on page 195 deal with accounting operations of the 354 municipal electrical utilities. These statements are the balance sheets and operating statements of the utilities alphabetically arranged for the Southern Ontario System and the Northern Ontario Properties. The other two statements, designated "Statement C" and "Statement D", give rates and statistics for each of the 354 utilities and 28 Commission-owned local systems. Both statements are alphabetically arranged. The rate schedules in Statement "C" are supplemented by typical monthly bills for selected levels of consumption to facilitate comparison of the cost of service in different municipalities. Statement "D" gives information supplementary to that given in Statement "B" regarding customers, revenue, and consumption, both total and average per customer, as well as average unit costs for the three main classes of service. The population figures given are those recorded in the Municipal Directory for 1960 published by the Department of Municipal Affairs of Ontario.

## MUNICIPAL ELECTRICAL SERVICE

### Statistical Tables

#### STATEMENTS A and B—

##### Financial Statements of the Municipal Electrical Utilities

Consolidated for Years 1950 to 1959.....Page 194

By Municipalities . . . . .Page 196

#### STATEMENT C—

##### Rates and Typical Bills for Electrical Service Provided by the

354 Municipal Electrical Utilities and 28 Local Systems .....Page 246

#### STATEMENT D—

##### Customers, Revenue, and Consumption in Municipalities Served by

the 354 Municipal Electrical Utilities and 28 Local Systems .....Page 268

## MUNICIPAL ELECTRICAL UTILITIES

Year.....	1950	1951	1952	1953
Number of municipalities included.....	321	324	327	332
<b>A. BALANCE SHEETS</b>				
<b>FIXED ASSETS</b>	\$	\$	\$	\$
Plant and facilities at cost.....	156,148,064	173,722,457	193,795,886	214,595,382
Accumulated depreciation.....	46,310,559	48,087,417	50,985,329	54,282,571
Net fixed assets.....	109,837,505	125,635,040	142,810,557	160,312,811
<b>CURRENT ASSETS</b>				
Cash on hand and in bank.....	2,807,734	3,276,779	4,667,729	4,884,136
Investment in government securities..	19,706,945	16,291,593	11,542,720	10,716,659
Accounts receivable.....	6,922,076	7,727,033	7,386,628	10,298,699
Total current assets.....	29,436,755	27,295,405	23,597,077	25,899,494
<b>OTHER ASSETS</b>				
Inventory of stores.....	5,114,209	7,514,369	8,001,403	7,527,844
Sinking fund on local debentures....	592,491	613,435	388,410	410,806
Miscellaneous.....	1,685,128	1,636,237	1,889,669	2,393,860
Total other assets.....	7,391,828	9,764,041	10,279,482	10,332,510
Equity in Ontario Hydro Systems.....	108,475,000	118,269,171	128,655,935	140,068,857
	<b>255,141,090</b>	<b>280,963,657</b>	<b>305,343,051</b>	<b>336,613,672</b>
<b>LIABILITIES</b>				
Debentures outstanding.....	14,069,133	18,889,520	24,159,239	29,827,723
Accounts payable.....	7,377,031	9,738,476	10,375,202	10,943,035
Other.....	1,489,029	1,612,914	1,762,833	2,224,181
Total liabilities.....	22,935,193	30,240,910	36,297,274	42,994,939
<b>RESERVES</b>				
Equity in Ontario Hydro Systems....	108,475,000	118,269,171	128,655,935	140,068,857
Other.....	4,314,186	5,628,317	8,008,752	8,153,001
Total reserves.....	112,789,186	123,897,488	136,664,687	148,221,858
<b>CAPITAL</b>				
Debentures redeemed.....	56,534,878	59,434,312	60,260,350	61,417,714
Local sinking fund.....	592,491	613,435	388,410	410,806
Accumulated net income invested in plant or held as working funds...	62,522,125	67,511,315	72,374,288	83,934,775
Frequency standardization expense charged this year.....	232,783	733,803	641,958	366,420
Total capital.....	119,416,711	126,825,259	132,381,090	145,396,875
	<b>255,141,090</b>	<b>280,963,657</b>	<b>305,343,051</b>	<b>336,613,672</b>
<b>B. OPERATING STATEMENTS</b>				
<b>REVENUE</b>				
Sales of electric energy.....	72,091,026	80,964,214	88,744,441	107,997,010
Other.....	1,432,506	1,347,467	1,314,598	1,257,311
Total revenue.....	<b>73,523,532</b>	<b>82,311,681</b>	<b>90,059,039</b>	<b>109,254,321</b>
<b>EXPENSE</b>				
Power purchased.....	46,400,041	50,854,323	55,583,501	69,750,630
Local generation.....	263,958	290,579	322,179	319,744
Operation and maintenance.....	7,889,233	8,886,314	9,918,638	10,674,897
Administration.....	6,153,794	7,283,472	7,645,806	8,236,239
Fixed charges—interest and principal..	1,478,056	1,524,931	1,981,386	2,400,468
—depreciation.....	4,076,474	4,717,497	5,293,509	5,832,594
—other.....	1,769,378	87,225	71,211	147,083
Total expense.....	<b>68,030,934</b>	<b>73,644,341</b>	<b>80,816,230</b>	<b>97,361,655</b>
Net income or net expense.....	<b>5,492,598</b>	<b>8,667,340</b>	<b>9,242,809</b>	<b>11,892,666</b>
Number of customers.....	867,916	904,880	941,975	986,144

## CONSOLIDATED FINANCIAL STATEMENTS 1950-1959

1954	1955	1956	1957	1958	1959
338	343	350	351	354	354
\$ 243,525,700 58,973,786	\$ 267,090,752 62,413,111	\$ 298,832,207 66,539,420	\$ 327,925,974 68,975,083	\$ 349,706,161 72,673,866	\$ 385,419,306 77,551,575
184,551,914	204,677,641	232,292,787	258,950,891	277,032,295	307,867,731
7,376,869	9,277,807	9,858,536	10,819,896	10,769,037	10,400,010
16,361,137	17,392,469	15,512,896	14,174,408	13,333,906	15,560,183
10,695,799	9,939,403	12,776,466	12,573,922	13,911,267	13,463,791
34,433,805	36,609,679	38,147,898	37,568,226	38,014,210	39,423,984
7,413,229	7,900,466	9,681,858	9,579,584	17,237,653	9,381,215
383,454	383,751	290,682	561,622	1,033,436	1,726,182
3,465,797	2,323,308	2,399,184	1,894,582	2,214,392	2,421,279
11,262,480	10,607,525	12,371,724	12,035,788	20,485,481	13,528,676
152,461,822	167,250,921	183,262,708	200,293,236	218,736,441	238,790,589
<b>382,710,021</b>	<b>419,145,766</b>	<b>466,075,117</b>	<b>508,848,141</b>	<b>554,268,427</b>	<b>599,610,980</b>
45,645,051	49,776,907	58,528,557	63,315,360	69,363,792	70,456,844
11,090,473	10,574,522	11,633,156	11,226,905	10,105,465	10,589,995
2,843,742	3,493,146	3,910,276	4,207,237	6,175,200	6,565,031
59,579,266	63,844,575	74,071,989	78,749,502	85,644,457	87,611,870
152,461,822	167,250,921	183,262,708	200,293,236	218,736,441	238,790,589
8,095,705	7,765,477	6,948,236	5,658,849	3,507,375	2,864,918
160,557,527	175,016,398	190,210,944	205,952,085	222,243,816	241,655,507
64,210,220	66,488,672	69,338,990	72,087,556	75,021,200	77,881,620
383,454	383,751	290,682	561,622	1,033,436	1,726,182
98,687,493	114,727,112	132,983,134	152,057,614	170,871,551	190,444,985
707,939	1,314,742	820,622	560,238	546,033	290,816
162,573,228	180,284,793	201,792,184	224,146,554	246,380,154	270,343,603
<b>382,710,021</b>	<b>419,145,766</b>	<b>466,075,117</b>	<b>508,848,141</b>	<b>554,268,427</b>	<b>599,610,980</b>
119,510,834	129,810,298	142,629,092	151,855,664	160,700,759	175,686,813
1,345,281	1,457,199	1,554,347	1,580,224	1,723,986	2,400,070
<b>120,856,115</b>	<b>131,267,497</b>	<b>144,183,439</b>	<b>153,435,888</b>	<b>162,424,745</b>	<b>178,086,883</b>
75,589,512	79,779,898	87,344,024	92,682,089	98,563,451	111,160,867
426,606	459,594	501,386	575,771	509,240	531,076
11,527,269	12,076,620	13,406,955	14,362,587	15,544,060	17,065,080
9,299,705	9,896,805	11,015,893	12,086,583	13,654,386	14,954,828
3,242,705	4,216,877	4,744,936	5,504,842	6,175,773	6,824,770
6,547,361	7,193,495	7,709,546	8,389,004	9,216,594	10,030,350
141,824	144,121	59,374	53,525	13,060	14,316
<b>106,774,982</b>	<b>113,767,410</b>	<b>124,782,114</b>	<b>133,654,401</b>	<b>143,676,564</b>	<b>160,581,287</b>
<b>14,081,133</b>	<b>17,500,087</b>	<b>19,401,325</b>	<b>19,781,487</b>	<b>18,748,181</b>	<b>17,505,596</b>
1,045,742	1,089,835	1,153,371	1,192,357	1,255,805	1,310,099



## Municipal Electrical Utilities Financial

## Southern Ontario System

Municipality	Acton	Ailsa Craig	Ajax	Alexandria	Alfred	Allston
Population	4,204	547	8,013	2,529	952	2,918
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost	319,075	38,360	821,448	237,326	61,060	166,963
Accumulated depreciation	30,277	631	129,963	54,953	16,408	32,483
Net fixed assets	288,798	37,729	691,485	182,373	44,652	134,480
<b>CURRENT ASSETS</b>						
Cash on hand and in bank	29,028	4,473	51,756	11,496	19,653	14,203
Investment in government securities	3,000			13,000		18,000
Accounts receivable	15,717	187	13,670	2,540	4,689	5,500
Total current assets	47,745	4,660	65,426	27,036	24,342	37,703
<b>OTHER ASSETS</b>						
Inventory of stores	909		23,212	11,177		5,302
Sinking fund on local debentures						
Miscellaneous	628	65	876	221	769	
Total other assets	1,537	65	24,088	11,398	769	5,302
Equity in Ontario Hydro Systems	336,939	49,858	51,332	121,440	4,412	117,757
	<b>675,019</b>	<b>92,312</b>	<b>832,331</b>	<b>342,247</b>	<b>74,175</b>	<b>295,242</b>
<b>LIABILITIES</b>						
Debentures outstanding	62,100		316,000	5,643	32,500	
Accounts payable	1,039	141	20,521	319	1,381	10
Other	7,482	230	33,297	2,957	2,721	4,066
Total liabilities	70,621	371	369,818	8,919	36,602	4,076
<b>RESERVES</b>						
Equity in Ontario Hydro Systems	336,939	49,858	51,332	121,440	4,412	117,757
Other						117
Total reserves	336,939	49,858	51,332	121,440	4,412	117,874
<b>CAPITAL</b>						
Debentures redeemed	22,400	6,884	34,000	47,657	5,500	29,990
Local sinking fund						
Accumulated net income invested in plant or held as working funds	243,794	35,016	377,181	164,231	27,661	143,302
Frequency standardization expense charged this year	1,265	183				
Total capital	267,459	42,083	411,181	211,888	33,161	173,292
	<b>675,019</b>	<b>92,312</b>	<b>832,331</b>	<b>342,247</b>	<b>74,175</b>	<b>295,242</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy	217,338	17,605	312,973	81,556	22,011	98,659
Other	414	32	4,308	4,793	323	879
Total revenue	<b>217,752</b>	<b>17,637</b>	<b>317,281</b>	<b>86,349</b>	<b>22,334</b>	<b>99,538</b>
<b>EXPENSE</b>						
Power purchased	153,460	12,304	164,089	59,077	13,383	63,467
Local generation						
Operation and maintenance	17,809	945	23,038	5,178	1,473	12,543
Administration	13,314	867	45,601	7,866	2,086	8,402
Fixed charges—interest and principal	5,589		27,571	2,072	3,096	
—depreciation	6,726	804	19,384	6,465	1,734	4,284
—other						
Total expense	<b>196,898</b>	<b>14,920</b>	<b>279,683</b>	<b>80,658</b>	<b>21,772</b>	<b>88,696</b>
Net income or net expense	<b>20,854</b>	<b>2,717</b>	<b>37,598</b>	<b>5,691</b>	<b>562</b>	<b>10,842</b>
Number of customers	1,303	224	2,157	842	298	1,041

Statements for the Year Ended December 31, 1959

Almonte	Alvinston	Amherst- burg	Ancaster Twp.	Apple Hill	Arkona	Arnprior	Arthur	Athens
3,227	648	4,389	12,207	400	476	5,482	1,215	964
\$ 379,301 84,427	\$ 56,928 15,456	\$ 367,562 72,817	\$ 241,074 31,163	\$ 22,151 4,522	\$ 42,635 9,294	\$ 409,419 42,839	\$ 101,161 21,279	\$ 60,671 8,960
294,874	41,472	294,745	209,911	17,629	33,341	366,580	79,882	51,711
3,297	1,781	25	8,788	1,478	2,048	36,614	.....	770
52,000	3,500	17,835	.....	3,000	4,000	.....	10,000	16,000
2,774	858	3,073	1,472	688	1,077	2,899	1,129	2,306
58,071	6,139	20,933	10,260	5,166	7,125	39,513	11,129	19,076
12,251	17	6,361	476	.....	.....	4,777	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	200	272	864	500	.....	180	1,500	.....
12,251	217	6,633	1,340	500	.....	4,957	1,500	.....
42,887	48,924	263,501	103,095	11,668	27,164	170,790	71,602	29,304
<b>408,083</b>	<b>96,752</b>	<b>585,812</b>	<b>324,606</b>	<b>34,963</b>	<b>67,630</b>	<b>581,840</b>	<b>164,113</b>	<b>100,091</b>
.....	.....	20,700	82,506	.....	.....	48,449	.....	.....
7,606	3	3,033	261	.....	.....	3,184	2,953	1,848
1,118	73	4,447	2,020	37	70	8,764	1,670	193
8,724	76	28,180	84,787	37	70	60,397	4,623	2,041
42,887	48,924	263,501	103,095	11,668	27,164	170,790	71,602	29,304
2,450	33	438	.....	.....	.....	.....	.....	206
45,337	48,957	263,939	103,095	11,668	27,164	170,790	71,602	29,510
72,000	23,529	47,809	46,604	5,080	13,113	77,020	23,914	12,988
.....	.....	.....	.....	.....	.....	.....	.....	.....
282,022	23,968	244,271	88,722	18,178	27,283	273,633	63,974	55,552
.....	222	1,613	1,398	.....	.....	.....	.....	.....
354,022	47,719	293,693	136,724	23,258	40,396	350,653	87,888	68,540
<b>408,083</b>	<b>96,752</b>	<b>585,812</b>	<b>324,606</b>	<b>34,963</b>	<b>67,630</b>	<b>581,840</b>	<b>164,113</b>	<b>100,091</b>
97,231	17,142	190,941	124,540	6,811	17,487	187,498	37,704	17,098
3,964	129	2,410	634	165	225	2,796	1,111	846
<b>101,195</b>	<b>17,271</b>	<b>193,351</b>	<b>125,174</b>	<b>6,976</b>	<b>17,712</b>	<b>190,294</b>	<b>38,815</b>	<b>17,944</b>
45,031	10,260	127,793	77,056	3,288	12,033	131,666	24,838	12,838
9,670	.....	.....	.....	.....	.....	.....	.....	.....
8,716	1,716	10,788	16,052	917	775	7,618	4,762	1,319
10,976	1,649	17,212	10,567	874	1,133	16,388	2,689	1,596
.....	88	4,659	9,051	.....	10	6,619	.....	.....
9,742	1,660	9,349	5,727	574	1,162	9,455	2,592	1,474
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>84,135</b>	<b>15,373</b>	<b>169,801</b>	<b>118,453</b>	<b>5,653</b>	<b>15,113</b>	<b>171,746</b>	<b>34,881</b>	<b>17,227</b>
<b>17,060</b>	<b>1,898</b>	<b>23,550</b>	<b>6,721</b>	<b>1,323</b>	<b>2,599</b>	<b>18,548</b>	<b>3,934</b>	<b>717</b>
1,062	319	1,392	1,121	126	199	1,740	488	348

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Aurora	Avonmore	Aylmer	Ayr	Baden	Bancroft
Population.....	5,302	277	4,536	1,019	875	2,619
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	468,056	17,629	301,900	76,403	65,315	266,601
Accumulated depreciation.....	67,792	4,579	75,386	11,708	9,940	59,385
Net fixed assets.....	400,264	13,050	226,514	64,695	55,375	207,216
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	2,034	2,378	34,397	.....	2,888	31,730
Investment in government securities.....	.....	.....	.....	10,500	6,500	.....
Accounts receivable.....	10,718	1,104	9,424	852	2,621	3,265
Total current assets.....	12,752	3,482	43,821	11,352	12,009	34,995
<b>OTHER ASSETS</b>						
Inventory of stores.....	1,948	.....	446	15	70	10,783
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	134	549	517	.....	.....	1,003
Total other assets.....	2,082	549	963	15	70	11,786
Equity in Ontario Hydro Systems.....	138,938	.....	237,408	62,820	108,014	21,591
	<b>554,036</b>	<b>17,081</b>	<b>508,706</b>	<b>138,882</b>	<b>175,468</b>	<b>275,588</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	.....	14,000	43,000	.....	.....	80,375
Accounts payable.....	21,776	2,223	316	4,866	400	754
Other.....	97,444	423	3,336	338	90	2,259
Total liabilities.....	119,220	16,646	46,652	5,204	490	83,388
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	138,938	.....	237,408	62,820	108,014	21,591
Other.....	134	.....	337	.....	.....	.....
Total reserves.....	139,072	.....	237,745	62,820	108,014	21,591
<b>CAPITAL</b>						
Debentures redeemed.....	.....	.....	45,702	17,503	5,000	52,125
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.....	295,340	435	190,597	57,510	61,633	118,484
Frequency standardization expense charged this year.....	404	.....	11,990	4,155	331	.....
Total capital.....	295,744	435	224,309	70,858	66,964	170,609
	<b>554,036</b>	<b>17,081</b>	<b>508,706</b>	<b>138,882</b>	<b>175,468</b>	<b>275,588</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>		3 months' operation				
Sales of electric energy.....	213,936	2,577	202,217	38,263	38,180	90,778
Other.....	7,638	5	685	512	208	210
Total revenue.....	<b>221,574</b>	<b>2,582</b>	<b>202,902</b>	<b>38,775</b>	<b>38,388</b>	<b>90,988</b>
<b>EXPENSE</b>						
Power purchased.....	160,656	1,463	138,178	26,503	28,848	48,706
Local generation.....	.....	.....	.....	.....	.....	4,628
Operation and maintenance.....	17,094	62	12,059	3,524	1,734	5,601
Administration.....	19,123	176	9,962	2,160	2,041	6,400
Fixed charges—interest and principal	791	317	5,116	67	2	9,907
—depreciation.....	9,668	129	8,535	1,942	1,573	7,024
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>207,332</b>	<b>2,147</b>	<b>173,850</b>	<b>34,196</b>	<b>34,198</b>	<b>82,266</b>
Net income or net expense.....	<b>14,242</b>	<b>435</b>	<b>29,052</b>	<b>4,579</b>	<b>4,190</b>	<b>8,722</b>
Number of customers.....	2,231	115	1,580	367	282	786

## Statements for the Year Ended December 31, 1959

Barrie	Barry's Bay	Bath	Beachville	Beamsville	Beaverton	Beeton	Belle River	Belleville
20,899	1,461	650	813	2,356	1,156	775	1,919	28,700
\$ 1,586,129 388,868	\$ 81,328 4,713	\$ 60,252 11,199	\$ 94,098 23,665	\$ 126,874 24,924	\$ 102,546 18,443	\$ 65,671 6,681	\$ 105,443 20,739	\$ 1,675,302 299,485
1,197,261	76,615	49,053	70,433	101,950	84,103	58,990	84,704	1,375,817
150	12,642	3,625	8,809	2,239	4,871	3,948	8,032	16,498
14,062	.....	.....	25,000	4,000	.....	1,500	2,000	205,000
37,574	571	581	1,979	1,685	768	892	1,532	59,219
51,786	13,213	4,206	35,788	7,924	5,639	6,340	11,564	280,717
36,251	.....	.....	.....	.....	171	.....	353	25,751
654	.....	.....	4	.....	.....	500	945	.....
36,905	.....	.....	4	.....	171	500	1,298	25,751
808,748	8,708	14,369	169,811	70,326	82,895	52,484	54,071	1,061,384
<b>2,094,700</b>	<b>98,536</b>	<b>67,628</b>	<b>276,036</b>	<b>180,200</b>	<b>172,808</b>	<b>118,314</b>	<b>151,637</b>	<b>2,743,669</b>
.....	.....	8,500	.....	.....	.....	.....	5,400	.....
47,902	1,065	512	2,337	1,822	.....	315	196	252,098
20,252	326	834	410	1,347	695	974	1,402	37,922
68,154	1,391	9,846	2,747	3,169	695	1,289	6,998	290,020
808,748	8,708	14,369	169,811	70,326	82,895	52,484	54,071	1,061,384
500	.....	50	193	.....	370	86	15	.....
809,248	8,708	14,419	170,004	70,326	83,265	52,570	54,086	1,061,384
65,366	7,500	9,000	5,537	37,500	12,839	13,610	15,100	174,997
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,151,932	80,937	34,363	97,362	68,026	76,009	50,845	74,529	1,217,268
.....	.....	.....	386	1,179	.....	.....	924	.....
1,217,298	88,437	43,363	103,285	106,705	88,848	64,455	90,553	1,392,265
<b>2,094,700</b>	<b>98,536</b>	<b>67,628</b>	<b>276,036</b>	<b>180,200</b>	<b>172,808</b>	<b>118,314</b>	<b>151,637</b>	<b>2,743,669</b>
782,710	22,269	18,841	121,702	78,127	61,498	28,700	48,597	866,243
5,240	234	6	1,701	550	583	36	240	15,365
<b>787,950</b>	<b>22,503</b>	<b>18,847</b>	<b>123,403</b>	<b>78,677</b>	<b>62,081</b>	<b>28,736</b>	<b>48,837</b>	<b>881,608</b>
483,612	13,366	9,894	104,531	52,844	40,172	16,883	24,749	628,098
84,777	1,618	857	4,282	3,630	4,677	2,167	7,995	70,066
54,836	2,366	2,192	1,451	6,100	4,567	1,895	7,151	77,356
304	.....	995	7	.....	.....	12	1,550	.....
42,970	1,714	1,529	2,490	3,270	2,692	1,496	2,686	36,382
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>666,499</b>	<b>19,064</b>	<b>15,467</b>	<b>112,761</b>	<b>65,844</b>	<b>52,108</b>	<b>22,453</b>	<b>44,131</b>	<b>811,902</b>
<b>121,451</b>	<b>3,439</b>	<b>3,380</b>	<b>10,642</b>	<b>12,833</b>	<b>9,973</b>	<b>6,283</b>	<b>4,706</b>	<b>69,706</b>
6,803	401	245	290	827	538	308	686	9,450



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Blenheim	Bloomfield	Blyth	Bobcaygeon	Bolton	Bothwell
Population.....	2,975	755	730	1,180	1,702	804
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	287,789	55,135	63,920	171,853	142,273	56,790
Accumulated depreciation.....	38,909	17,756	8,809	56,117	19,273	15,528
Net fixed assets.....	248,880	37,379	55,111	115,736	123,000	41,262
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	1,338	3,513	11,891	100	4,658	25
Investment in government securities.....	.....	11,992	2,000	.....	.....	5,808
Accounts receivable.....	2,746	248	252	387	2,279	1,202
Total current assets.....	4,084	15,753	14,143	487	6,937	7,035
<b>OTHER ASSETS</b>						
Inventory of stores.....	1,250	.....	44	8,899	329	32
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	5,289	1,400	.....	900	1,760	165
Total other assets.....	6,539	1,400	44	9,799	2,089	197
Equity in Ontario Hydro Systems.....	151,430	32,010	47,480	21,563	69,804	57,269
	<b>410,933</b>	<b>86,542</b>	<b>116,778</b>	<b>147,585</b>	<b>201,830</b>	<b>105,763</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	58,082	.....	.....	.....	51,574	.....
Accounts payable.....	.....	50	86	37,237	8,934	1,384
Other.....	7,353	657	247	380	3,291	160
Total liabilities.....	65,435	707	333	37,617	63,799	1,544
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....	151,430	32,010	47,480	21,563	69,804	57,269
Other.....	183	.....	.....	.....	100	.....
Total reserves.....	151,613	32,010	47,480	21,563	69,904	57,269
<b>CAPITAL</b>						
Debentures redeemed.....	39,918	9,797	16,033	15,283	15,729	5,534
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.....	152,588	44,028	52,874	73,122	52,288	43,278
Frequency standardization expense charged this year.....	1,379	.....	58	.....	110	1,862
Total capital.....	193,885	53,825	68,965	88,405	68,127	46,950
	<b>410,933</b>	<b>86,542</b>	<b>116,778</b>	<b>147,585</b>	<b>201,830</b>	<b>105,763</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	95,956	16,735	33,611	50,989	62,267	22,341
Other.....	2,827	551	105	270	212	477
Total revenue.....	<b>98,783</b>	<b>17,286</b>	<b>33,716</b>	<b>51,259</b>	<b>62,479</b>	<b>22,818</b>
<b>EXPENSE</b>						
Power purchased.....	52,652	12,088	24,271	23,548	39,813	14,616
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	7,800	1,469	2,692	5,249	4,934	2,676
Administration.....	16,679	2,001	1,869	7,279	6,431	3,351
Fixed charges—interest and principal.....	9,844	1	.....	605	4,896	2
—depreciation.....	6,829	1,051	1,556	3,380	3,303	1,635
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>93,804</b>	<b>16,610</b>	<b>30,388</b>	<b>40,061</b>	<b>59,377</b>	<b>22,280</b>
Net income or net expense.....	<b>4,979</b>	<b>676</b>	<b>3,328</b>	<b>11,198</b>	<b>3,102</b>	<b>538</b>
Number of customers.....	1,100	307	326	709	650	321

Statements for the Year Ended December 31, 1959

Bowman- ville 7,203	Bracebridge 2,821	Bradford 2,298	Braeside 559	Brampton 15,241	Brantford 53,201	Brantford Twp. 7,247	Brechin 259	Bridgeport 1,617
\$ 626,946 172,292	\$ 819,477 190,535	\$ 219,164 27,639	\$ 28,735 1,380	\$ 1,341,774 112,266	\$ 4,491,130 1,017,080	\$ 911,478 226,818	\$ 17,893 2,829	\$ 81,751 17,817
454,654	628,942	191,525	27,355	1,229,508	3,474,050	684,660	15,064	63,934
17,091	15,750	13,235	4,475	100	18,094	26,553	889	6,780
119,178	.....	8,000	.....	1,500	22,000	54,825	7,000	5,000
4,329	10,263	8,191	6,757	9,841	77,499	5,500	146	929
140,598	26,013	29,426	11,232	11,441	117,593	86,878	8,035	12,709
15,405	15,056	11,019	.....	39,156	85,937	25,410	.....	22
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,487	300	245	.....	235	10,676	7,817	.....	841
16,892	15,356	11,264	.....	39,391	96,613	33,227	.....	863
401,163	1,663	92,024	14,829	717,443	4,064,890	174,670	22,540	42,049
<b>1,013,307</b>	<b>671,974</b>	<b>324,239</b>	<b>53,416</b>	<b>1,997,783</b>	<b>7,753,146</b>	<b>979,435</b>	<b>45,639</b>	<b>119,555</b>
.....	265,661	.....	1,966	294,000	587,675	506,909	.....	17,500
1,022	3	532	441	199,044	5,406	2,418	80	798
3,651	1,010	2,286	215	11,008	70,323	18,711	150	1,757
4,673	266,674	2,818	2,622	504,052	663,404	528,038	230	20,055
401,163	1,663	92,024	14,829	717,443	4,064,890	174,670	22,540	42,049
400	.....	100	.....	347	2,363	225	50	.....
401,563	1,663	92,124	14,829	717,790	4,067,253	174,895	22,590	42,049
71,000	240,139	23,351	4,035	125,286	865,439	62,103	2,664	14,868
.....	.....	.....	.....	.....	.....	.....	.....	.....
536,071	163,498	205,946	31,930	646,137	2,149,408	211,720	20,155	42,104
.....	.....	.....	.....	4,518	7,642	2,679	.....	479
607,071	403,637	229,297	35,965	775,941	3,022,489	276,502	22,819	57,451
<b>1,013,307</b>	<b>671,974</b>	<b>324,239</b>	<b>53,416</b>	<b>1,997,783</b>	<b>7,753,146</b>	<b>979,435</b>	<b>45,639</b>	<b>119,555</b>
252,065	131,117	93,210	40,992	506,235	2,129,460	356,683	6,897	41,585
6,730	1,045	880	419	4,174	3,269	4,334	250	445
<b>258,795</b>	<b>132,162</b>	<b>94,090</b>	<b>41,411</b>	<b>510,409</b>	<b>2,132,729</b>	<b>361,017</b>	<b>7,147</b>	<b>42,030</b>
182,529	1,881	55,302	29,521	362,224	1,530,713	184,381	4,702	28,265
.....	33,325	.....	.....	.....	.....	.....	.....	.....
23,807	17,504	12,707	1,293	26,291	130,814	37,991	865	3,293
18,008	11,655	8,698	1,125	29,857	91,028	23,337	718	5,245
.....	29,723	.....	465	28,449	66,576	42,884	.....	1,534
17,952	16,993	4,890	600	27,387	125,229	25,362	446	2,231
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>242,296</b>	<b>111,081</b>	<b>81,597</b>	<b>33,004</b>	<b>474,208</b>	<b>1,944,360</b>	<b>313,955</b>	<b>6,731</b>	<b>40,568</b>
<b>16,499</b>	<b>21,081</b>	<b>12,493</b>	<b>8,407</b>	<b>36,201</b>	<b>188,369</b>	<b>47,062</b>	<b>416</b>	<b>1,462</b>
2,402	1,173	795	159	4,910	16,738	2,074	95	441

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Brigden	Brighton	Brockville	Brussels	Burford	Burgessville 243
Population.....	518	2,260	16,622	845	1,030	
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	41,249	171,308	1,383,873	68,695	68,553	20,214
Accumulated depreciation.....	10,844	14,299	338,465	7,543	18,781	6,886
Net fixed assets.....	30,405	157,009	1,045,408	61,152	49,772	13,328
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	8,240	15,502	.....	665	10,268	2,746
Investment in government securities	1,951	10,000	12,000	.....	3,500	1,500
Accounts receivable.....	260	866	23,306	1,167	1,221	309
Total current assets.....	10,451	26,368	35,306	1,832	14,989	4,555
<b>OTHER ASSETS</b>						
Inventory of stores.....	48	7,404	25,765	88	136	.....
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	27	25	2,555	2,000	146	25
Total other assets.....	75	7,429	28,320	2,088	282	25
Equity in Ontario Hydro Systems....	38,994	78,838	934,636	57,297	61,453	20,343
	<b>79,925</b>	<b>269,644</b>	<b>2,043,670</b>	<b>122,369</b>	<b>126,496</b>	<b>38,251</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	.....	.....	83,500	.....	11,475	.....
Accounts payable.....	14	18,852	64,589	2,577	1,074	.....
Other.....	200	2,889	11,100	265	1,186	.....
Total liabilities.....	214	21,741	159,189	2,842	13,735	.....
<b>RESERVES</b>						
Equity in Ontario Hydro Systems....	38,994	78,838	934,636	57,297	61,453	20,343
Other.....	.....	.....	76	.....	.....	.....
Total reserves.....	38,994	78,838	934,712	57,297	61,453	20,343
<b>CAPITAL</b>						
Debentures redeemed.....	8,000	25,000	183,770	21,000	9,525	3,500
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	32,676	144,065	765,999	41,007	41,168	14,256
Frequency standardization expense charged this year.....	41	.....	.....	223	615	152
Total capital.....	40,717	169,065	949,769	62,230	51,308	17,908
	<b>79,925</b>	<b>269,644</b>	<b>2,043,670</b>	<b>122,369</b>	<b>126,496</b>	<b>38,251</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	15,064	69,812	681,807	35,032	43,249	9,625
Other.....	245	921	11,321	64	273	70
Total revenue.....	<b>15,309</b>	<b>70,733</b>	<b>693,128</b>	<b>35,096</b>	<b>43,522</b>	<b>9,695</b>
<b>EXPENSE</b>						
Power purchased.....	9,149	44,661	447,349	25,578	28,002	6,818
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	1,270	5,611	81,316	1,413	3,865	171
Administration.....	1,490	8,771	59,278	2,726	2,117	413
Fixed charges—interest and principal	1	.....	9,432	1	1,227	1
—depreciation.....	1,186	3,695	36,829	1,592	2,021	649
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>13,096</b>	<b>62,738</b>	<b>634,204</b>	<b>31,310</b>	<b>37,232</b>	<b>8,052</b>
Net income or net expense.....	<b>2,213</b>	<b>7,995</b>	<b>58,924</b>	<b>3,786</b>	<b>6,290</b>	<b>1,643</b>
Number of customers.....	221	972	5,488	386	414	99

## Statements for the Year Ended December 31, 1959

Burk's Falls	Burlington	Caledonia	Campbell- ford	Campbell- ville	Cannington	Cardinal	Carleton Place	Casselman
863	42,511	2,197	3,393	351	1,056	2,047	4,684	1,269
\$ 74,297 11,756	\$ 3,106,730 453,552	\$ 137,736 23,799	\$ 618,879 125,161	\$ 16,634 4,113	\$ 70,286 15,729	\$ 71,277 11,252	\$ 250,428 45,153	\$ 85,522 6,797
62,541	2,653,178	113,937	493,718	12,521	54,557	60,025	205,275	78,725
3,384	8,221	11,563	9,712	4,396	3,832	8,594	.....	14,073
4,900	37,500	.....	.....	500	6,000	1,500	15,000	14,000
2,653	61,351	2,564	5,649	210	400	639	3,839	20
10,937	107,072	14,127	15,361	5,106	10,232	10,733	18,839	28,093
134	48,196	413	8,900	.....	71	.....	6,813	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	99,327	99	1,579	.....	.....	1,000	100	4,838
134	147,523	512	10,479	.....	71	1,000	6,913	4,838
12,610	216,209	92,000	.....	12,905	61,991	51,846	334,045	11,107
86,222	3,123,982	220,576	519,558	30,532	126,851	123,604	565,072	122,763
13,721	2,040,932	3,000	65,000	.....	.....	.....	14,180	51,500
795	6,548	536	19,856	78	1,929	.....	6,307	9,381
196	95,418	2,248	4,960	.....	355	30	3,295	22
14,712	2,142,898	5,784	89,816	78	2,284	30	23,782	60,903
12,610	216,209	92,000	.....	12,905	61,991	51,846	334,045	11,107
.....	.....	.....	350	8	28	.....	141	.....
12,610	216,209	92,000	350	12,913	62,019	51,846	334,186	11,107
21,279	214,532	12,624	.....	5,448	14,532	11,014	59,117	18,500
.....	.....	.....	.....	.....	.....	.....	.....	.....
37,621	550,276	119,672	429,392	11,997	48,016	60,714	147,987	32,253
.....	67	9,504	.....	96	.....	.....	.....	.....
58,900	764,875	122,792	429,392	17,541	62,548	71,728	207,104	50,753
86,222	3,123,982	220,576	519,558	30,532	126,851	123,604	565,072	122,763
26,524	1,744,590	61,093	6 months' operation 48,740	8,878	35,836	43,507	173,216	37,436
543	5,306	68	727	104	387	285	1,132	770
27,067	1,749,896	61,161	49,467	8,982	36,223	43,792	174,348	38,206
17,197	1,010,728	35,024	7,548	5,831	24,612	31,481	108,691	21,033
.....	.....	.....	10,487	.....	.....	.....	.....	.....
2,482	114,412	5,456	7,979	487	2,248	3,506	18,318	1,523
2,948	136,438	7,388	12,671	447	2,591	3,296	24,416	3,060
3,039	176,744	666	2,788	.....	.....	.....	1,512	5,725
1,760	70,691	3,498	3,819	474	1,952	1,752	6,300	1,856
.....	.....	.....	.....	.....	.....	.....	.....	.....
27,426	1,509,013	52,032	45,292	7,239	31,403	40,035	159,237	33,197
359	240,883	9,129	4,175	1,743	4,820	3,757	15,111	5,009
333	13,086	774	1,258	88	441	643	1,669	370



Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Cayuga	Chalk River	Chatham	Chats- worth	Chesley	Chester- ville
Population.....	889	1,045	28,439	394	1,664	1,253
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	87,857	65,616	2,831,409	29,758	107,088	69,304
Accumulated depreciation.....	14,762	11,286	559,577	7,817	33,859	15,539
Net fixed assets.....	73,095	54,330	2,271,832	21,941	73,229	53,765
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	165	9,975	50	4,694	12,057	21,387
Investment in government securities	7,500		140,000	6,000	17,000	6,000
Accounts receivable.....	847	3,196	175,727	373	630	2,409
Total current assets.....	8,512	13,171	315,777	11,067	29,687	29,796
<b>OTHER ASSETS</b>						
Inventory of stores.....	276		92,163		521	
Sinking fund on local debentures.....						
Miscellaneous.....	2,144	2,633	44,479			
Total other assets.....	2,420	2,633	136,642		521	
Equity in Ontario Hydro Systems.....	41,082	8,305	1,631,663	22,704	140,774	105,059
	<b>125,109</b>	<b>78,439</b>	<b>4,355,914</b>	<b>55,712</b>	<b>244,211</b>	<b>188,620</b>
<b>LIABILITIES</b>						
Debentures outstanding.....		50,500	755,977			
Accounts payable.....	2,374	50	136,886		159	5
Other.....	1,105	460	23,290	133		104
Total liabilities.....	3,479	51,010	916,153	133	159	109
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....	41,082	8,305	1,631,663	22,704	140,774	105,059
Other.....	62		66,938			
Total reserves.....	41,144	8,305	1,698,601	22,704	140,774	105,059
<b>CAPITAL</b>						
Debentures redeemed.....	20,000	4,500	764,023	5,014	24,410	5,889
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	59,974	14,624	965,222	27,861	78,868	77,563
Frequency standardization expense charged this year.....	512		11,915			
Total capital.....	80,486	19,124	1,741,160	32,875	103,278	83,452
	<b>125,109</b>	<b>78,439</b>	<b>4,355,914</b>	<b>55,712</b>	<b>244,211</b>	<b>188,620</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	27,394	21,058	1,366,430	14,156	58,417	59,598
Other.....	646	356	10,464	267	871	450
Total revenue.....	<b>28,040</b>	<b>21,414</b>	<b>1,376,894</b>	<b>14,423</b>	<b>59,288</b>	<b>60,048</b>
<b>EXPENSE</b>						
Power purchased.....	15,330	13,506	654,359	9,971	39,881	41,693
Local generation.....						
Operation and maintenance.....	4,055	1,730	261,753	993	4,765	2,258
Administration.....	5,467	1,419	199,615	903	5,604	4,646
Fixed charges—interest and principal	89	4,360	94,776			
—depreciation.....	2,220	1,650	66,204	852	3,298	1,866
—other.....						
Total expense.....	<b>27,161</b>	<b>22,665</b>	<b>1,276,707</b>	<b>12,719</b>	<b>53,548</b>	<b>50,463</b>
Net income or net expense.....	<b>879</b>	<b>1,251</b>	<b>100,187</b>	<b>1,704</b>	<b>5,740</b>	<b>9,585</b>
Number of customers.....	374	270	9,458	167	707	440

Statements for the Year Ended December 31, 1959

Chippawa	Clifford	Clinton	Cobden	Cobourg	Colborne	Coldwater	Collingwood	Comber
2,744	534	2,980	876	9,338	1,256	748	8,302	596
\$ 174,593 30,434	\$ 40,197 5,790	\$ 277,065 41,271	\$ 59,496 6,562	\$ 818,147 175,431	\$ 88,932 8,740	\$ 51,941 11,801	\$ 495,380 90,853	\$ 51,115 11,148
144,159	34,407	235,794	52,934	642,716	80,192	40,140	404,527	39,967
602	9,049	15,126	5,167	67,905	130	12,149	20,058	3,373
.....	3,000	.....	18,000	10,000	.....	12,500	34,663	.....
6,126	515	2,093	290	29,071	2,816	3,148	8,146	642
6,728	12,564	17,219	23,457	106,976	2,946	27,797	62,867	4,015
770	17	5,602	.....	14,730	11,882	84	18,903	12
.....	.....	.....	.....	.....	.....	.....	.....	.....
412	2,016	2,132	.....	412	.....	115	409	211
1,182	2,033	7,734	.....	15,142	11,882	199	19,312	223
73,113	32,861	195,224	24,298	419,242	41,749	49,974	556,309	57,911
<b>225,182</b>	<b>81,865</b>	<b>455,971</b>	<b>100,689</b>	<b>1,184,076</b>	<b>136,769</b>	<b>118,110</b>	<b>1,043,015</b>	<b>102,116</b>
34,000	6,145	59,200	.....	.....	.....	.....	.....	2 610
4,045	2,571	256	674	.....	10,139	106	1,580	.....
2,423	336	8,265	208	12,249	1,476	156	7,045	622
40,468	9,052	67,721	882	12,249	11,615	262	8,625	3,232
73,113	32,861	195,224	24,298	419,242	41,749	49,974	556,309	57,911
440	.....	26	.....	.....	.....	136	600	15
73,553	32,861	195,250	24,298	419,242	41,749	50,110	556,909	57,926
14,350	8,800	64,270	4,949	105,994	12,195	6,867	38,183	10,091
.....	.....	.....	.....	.....	.....	.....	.....	.....
95,822	30,818	127,827	70,560	646,591	71,210	60,871	439,298	30,476
989	334	903	.....	.....	.....	.....	.....	391
111,161	39,952	193,000	75,509	752,585	83,405	67,738	477,481	40,958
<b>225,182</b>	<b>81,865</b>	<b>455,971</b>	<b>100,689</b>	<b>1,184,076</b>	<b>136,769</b>	<b>118,110</b>	<b>1,043,015</b>	<b>102,116</b>
67,616	22,456	122,820	21,643	437,390	47,108	29,956	316,360	19,202
76	608	1,049	915	1,649	1,573	605	2,611	4
<b>67,692</b>	<b>23,064</b>	<b>123,869</b>	<b>22,558</b>	<b>439,039</b>	<b>48,681</b>	<b>30,561</b>	<b>318,971</b>	<b>19,206</b>
41,224	14,359	78,873	17,444	288,637	29,083	17,828	223,124	11,306
.....	.....	.....	.....	.....	.....	.....	.....	.....
5,097	1,872	12,399	749	25,762	4,156	2,177	23,043	1,971
7,890	1,417	9,971	1,844	33,969	6,717	1,907	19,610	1,876
3,025	568	6,833	16	212	317	19	.....	419
4,284	1,006	6,311	1,384	21,900	1,964	1,465	12,473	1,382
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>61,520</b>	<b>19,222</b>	<b>114,387</b>	<b>21,437</b>	<b>370,480</b>	<b>42,237</b>	<b>23,396</b>	<b>278,250</b>	<b>16,954</b>
<b>6,172</b>	<b>3,842</b>	<b>9,482</b>	<b>1,121</b>	<b>68,559</b>	<b>6,444</b>	<b>7,165</b>	<b>40,721</b>	<b>2,252</b>
974	217	1,187	373	3,286	559	259	3,031	237

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Cookstown	Cottam	Courtright	Creemore	Dashwood	Deep River
Population.....	673	630	551	870	413	4,789
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	46,854	50,945	24,922	46,782	26,785	530,503
Accumulated depreciation.....	7,923	11,717	4,751	6,580	4,260	89,028
Net fixed assets.....	38,931	39,228	20,171	40,202	22,525	441,475
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	11,176	4,609	2,104	79	2,797	20,375
Investment in government securities.....		3,000	4,000	10,000		
Accounts receivable.....	633	365	184	1,195	167	2,159
Total current assets.....	11,809	7,974	6,288	11,274	2,964	22,534
<b>OTHER ASSETS</b>						
Inventory of stores.....		129				4,102
Sinking fund on local debentures.....						
Miscellaneous.....		188	2,830			6,367
Total other assets.....		317	2,830			10,469
Equity in Ontario Hydro Systems.....	25,075	21,261	20,833	45,700	33,165	11,594
	<b>75,815</b>	<b>68,780</b>	<b>50,122</b>	<b>97,176</b>	<b>58,654</b>	<b>486,072</b>
<b>LIABILITIES</b>						
Debentures outstanding.....		2,500				189,000
Accounts payable.....	145	84	3,500	12	102	1,540
Other.....	575	811	427	591		9,599
Total liabilities.....	720	3,395	3,927	603	102	200,139
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....	25,075	21,261	20,833	45,700	33,165	11,594
Other.....	94	26	80	58		
Total reserves.....	25,169	21,287	20,913	45,758	33,165	11,594
<b>CAPITAL</b>						
Debentures redeemed.....	12,000	11,500	8,138	2,824	3,400	6,000
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	37,926	32,234	17,111	47,991	21,836	268,339
Frequency standardization expense charged this year.....		364	33		151	
Total capital.....	49,926	44,098	25,282	50,815	25,387	274,339
	<b>75,815</b>	<b>68,780</b>	<b>50,122</b>	<b>97,176</b>	<b>58,654</b>	<b>486,072</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	18,977	16,145	8,406	25,177	16,076	165,142
Other.....	193	92	238	457	2	1,387
Total revenue.....	<b>19,170</b>	<b>16,237</b>	<b>8,644</b>	<b>25,634</b>	<b>16,078</b>	<b>166,529</b>
<b>EXPENSE</b>						
Power purchased.....	12,397	9,082	6,326	17,334	11,481	96,091
Local generation.....						
Operation and maintenance.....	1,226	495	577	2,294	691	11,601
Administration.....	1,133	1,667	925	1,668	1,441	18,494
Fixed charges—interest and principal.....		624	136		2	15,120
—depreciation.....	1,205	1,400	651	1,162	695	13,415
—other.....						
Total expense.....	<b>15,961</b>	<b>13,268</b>	<b>8,615</b>	<b>22,458</b>	<b>14,310</b>	<b>154,721</b>
Net income or net expense.....	<b>3,209</b>	<b>2,969</b>	<b>29</b>	<b>3,176</b>	<b>1,768</b>	<b>11,808</b>
Number of customers.....	248	237	194	358	179	1,320

## Statements for the Year Ended December 31, 1959

Delaware	Delhi	Deseronto	Dorchester	Drayton	Dresden	Drumbo	Dublin	Dundalk
411	3,317	1,819	865	616	2,174	375	271	854
\$ 25,086 7,143	\$ 283,450 50,956	\$ 114,532 25,897	\$ 54,195 12,077	\$ 50,249 8,706	\$ 177,775 23,757	\$ 28,589 9,928	\$ 30,385 7,005	\$ 51,020 11,684
17,943	232,494	88,635	42,118	41,543	154,018	18,661	23,380	39,336
2,867	200	5,388	3,070	5,751	4,384	2,415	3,661	12,234
.....	10,000	16,000	1,500	6,000	21,000	5,500	1,100	6,500
6,346	2,958	2,690	535	874	4,790	1,147	145	729
9,213	13,158	24,078	5,105	12,625	30,174	9,062	4,906	19,463
.....	12,854	10,016	.....	127	9,509	.....	.....	.....
70	29	.....	.....	.....	1,195	.....	1,500	.....
70	12,883	10,016	.....	127	10,704	.....	1,500	.....
17,549	93,810	53,924	31,604	46,094	129,221	26,807	20,614	53,982
<b>44,775</b>	<b>352,345</b>	<b>176,653</b>	<b>78,827</b>	<b>100,389</b>	<b>324,117</b>	<b>54,530</b>	<b>50,400</b>	<b>112,781</b>
.....	2,039	.....	2,383	.....	23,038	.....	.....	.....
7,308	964	85	2,439	2,268	121	130	1,500	95
30	4,467	1,172	343	325	2,841	111	55	255
7,338	7,470	1,257	5,165	2,593	26,000	241	1,555	350
17,549	93,810	53,924	31,604	46,094	129,221	26,807	20,614	53,982
23	75	.....	.....	.....	546	.....	.....	.....
17,572	93,885	53,924	31,604	46,094	129,767	26,807	20,614	53,982
4,000	82,961	15,000	4,917	9,500	28,385	4,500	6,200	5,727
.....	.....	.....	.....	.....	.....	.....	.....	.....
15,740	166,167	106,472	36,976	42,039	138,677	24,699	21,910	52,722
125	1,862	.....	165	163	1,288	1,717	121	.....
19,865	250,990	121,472	42,058	51,702	168,350	27,482	28,231	58,449
<b>44,775</b>	<b>352,345</b>	<b>176,653</b>	<b>78,827</b>	<b>100,389</b>	<b>324,117</b>	<b>54,530</b>	<b>50,400</b>	<b>112,781</b>
14,067	135,572	51,458	20,253	19,992	88,134	11,983	11,880	32,501
33	2,920	1,116	176	287	4,273	330	38	230
<b>14,100</b>	<b>138,492</b>	<b>52,574</b>	<b>20,429</b>	<b>20,279</b>	<b>92,407</b>	<b>12,313</b>	<b>11,918</b>	<b>32,731</b>
9,215	86,581	33,452	13,377	13,287	54,646	9,411	8,276	20,262
.....	.....	.....	.....	.....	.....	.....	.....	.....
670	13,010	6,200	2,475	1,469	10,825	404	324	3,747
1,096	11,860	7,475	1,324	1,827	15,267	1,152	1,008	2,526
2	2,111	.....	244	6	3,856	1	.....	.....
709	6,950	3,126	1,457	1,300	3,950	565	854	1,421
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>11,692</b>	<b>120,512</b>	<b>50,253</b>	<b>18,877</b>	<b>17,889</b>	<b>88,544</b>	<b>11,533</b>	<b>10,462</b>	<b>27,956</b>
<b>2,408</b>	<b>17,980</b>	<b>2,321</b>	<b>1,552</b>	<b>2,390</b>	<b>3,863</b>	<b>780</b>	<b>1,456</b>	<b>4,775</b>
136	1,307	633	325	259	880	166	110	414



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Dundas	Dunnville	Durham	Dutton	East York Twp.	Eganville
Population.....	12,626	5,212	2,075	777	67,262	1,549
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	843,376	349,834	139,270	41,858	3,788,866	159,182
Accumulated depreciation.....	133,206	64,084	15,494	13,143	540,873	36,139
Net fixed assets.....	710,170	285,750	123,776	28,715	3,247,993	123,043
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	16,510	34,257	18,609	3,758	128,537	7,089
Investment in government securities	9,000	.....	4,000	5,500	350,000	10,000
Accounts receivable.....	8,148	6,714	1,494	1,551	155,109	311
Total current assets.....	33,658	40,971	24,103	10,809	633,646	17,400
<b>OTHER ASSETS</b>						
Inventory of stores.....	11,310	32,223	1,068	.....	31,694	2,422
Sinking fund on local debentures.....	.....	.....	.....	.....	73,903	.....
Miscellaneous.....	8,095	1,037	.....	.....	7,788	1,993
Total other assets.....	19,405	33,260	1,068	.....	113,385	4,415
Equity in Ontario Hydro Systems.....	563,930	295,129	121,629	67,299	1,940,694	6,932
	<b>1,327,163</b>	<b>655,110</b>	<b>270,576</b>	<b>106,823</b>	<b>5,935,718</b>	<b>151,790</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	289,600	54,900	.....	.....	639,017	47,036
Accounts payable.....	849	1,387	1,037	281	185,012	.....
Other.....	16,450	7,628	1,091	307	30,180	.....
Total liabilities.....	306,899	63,915	2,128	588	854,209	47,036
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....	563,930	295,129	121,629	67,299	1,940,694	6,932
Other.....	.....	.....	.....	.....	9,254	.....
Total reserves.....	563,930	295,129	121,629	67,299	1,949,948	6,932
<b>CAPITAL</b>						
Debentures redeemed.....	83,400	85,600	25,324	8,407	638,868	52,963
Local sinking fund.....	.....	.....	.....	.....	73,903	.....
Accumulated net income invested in plant or held as working funds.....	369,234	208,460	121,495	32,350	2,417,220	44,859
Frequency standardization expense charged this year.....	3,700	2,006	.....	1,821	1,570	.....
Total capital.....	456,334	296,066	146,819	38,936	3,131,561	97,822
	<b>1,327,163</b>	<b>655,110</b>	<b>270,576</b>	<b>106,823</b>	<b>5,935,718</b>	<b>151,790</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	376,832	225,700	87,251	22,024	1,813,935	52,331
Other.....	1,527	165	782	230	43,166	563
<b>Total revenue.....</b>	<b>378,359</b>	<b>225,865</b>	<b>88,033</b>	<b>22,254</b>	<b>1,857,101</b>	<b>52,894</b>
<b>EXPENSE</b>						
Power purchased.....	222,826	141,437	54,125	16,119	1,217,197	16,439
Local generation.....	.....	.....	.....	.....	.....	11,483
Operation and maintenance.....	38,521	22,281	10,114	2,380	135,759	3,032
Administration.....	21,707	12,423	5,971	2,037	165,429	5,442
Fixed charges—interest and principal	17,338	5,396	.....	4	77,419	7,035
—depreciation.....	19,597	9,009	3,209	844	89,430	4,169
—other.....	.....	.....	.....	.....	.....	.....
<b>Total expense.....</b>	<b>319,989</b>	<b>190,546</b>	<b>73,419</b>	<b>21,384</b>	<b>1,685,234</b>	<b>47,600</b>
<b>Net income or net expense.....</b>	<b>58,370</b>	<b>35,319</b>	<b>14,614</b>	<b>870</b>	<b>171,867</b>	<b>5,294</b>
Number of customers.....	3,455	1,903	808	346	22,107	559

## Statements for the Year Ended December 31, 1959

Elmira	Elmvale	Elmwood	Elora	Embros	Erieau	Erie Beach	Erin	Essex
2,939	925	V.A.	1,479	562	462	132	1,005	3,442
\$ 312,006 70,569	\$ 64,317 16,955	\$ 22,865 6,461	\$ 96,899 30,618	\$ 42,934 14,295	\$ 76,486 10,913	\$ 23,239 1,900	\$ 52,847 5,048	\$ 256,352 54,868
241,437	47,362	16,404	66,281	28,639	65,573	21,339	47,799	201,484
19,204	7,663	2,402	17,627	5,126	5,302	.....	4,644	15,811
.....	9,876	8,000	.....	6,000	7,760	.....	5,112	.....
2,116	555	84	1,407	1,057	1,094	557	615	3,884
21,320	18,094	10,486	19,034	12,183	14,156	557	10,371	19,695
1,258	3,520	.....	138	.....	86	30	.....	3,583
.....	.....	.....	.....	.....	.....	.....	.....	.....
665	46	.....	163	.....	2,970	738	258	320
1,923	3,566	.....	301	.....	3,056	768	258	3,903
318,061	56,472	19,047	130,668	42,331	35,393	6,523	12,766	143,509
<b>582,741</b>	<b>125,494</b>	<b>45,937</b>	<b>216,284</b>	<b>83,153</b>	<b>118,178</b>	<b>29,187</b>	<b>71,194</b>	<b>368,591</b>
.....	.....	.....	5,500	.....	12,504	3,724	5,075	8,400
1,186	717	106	431	378	.....	2,357	404	28,741
2,306	585	55	1,334	100	1,073	262	762	2,055
3,492	1,302	161	7,265	478	13,577	6,343	6,241	39,196
318,061	56,472	19,047	130,668	42,331	35,393	6,523	12,766	143,509
.....	50	.....	.....	.....	22	81	50	500
318,061	56,522	19,047	130,668	42,331	35,415	6,604	12,816	144,009
37,169	6,544	6,106	14,500	7,500	9,379	4,577	9,425	29,100
.....	.....	.....	.....	.....	.....	.....	.....	.....
222,711	61,126	20,623	63,046	32,524	59,380	11,483	42,712	154,572
1,308	.....	.....	805	320	427	180	.....	1,714
261,188	67,670	26,729	78,351	40,344	69,186	16,240	52,137	185,386
<b>582,741</b>	<b>125,494</b>	<b>45,937</b>	<b>216,284</b>	<b>83,153</b>	<b>118,178</b>	<b>29,187</b>	<b>71,194</b>	<b>368,591</b>
174,936	28,099	8,451	50,735	21,146	26,943	5,421	29,748	104,123
2,963	588	421	179	385	776	1	308	303
<b>177,899</b>	<b>28,687</b>	<b>8,872</b>	<b>50,914</b>	<b>21,531</b>	<b>27,719</b>	<b>5,422</b>	<b>30,056</b>	<b>104,426</b>
130,839	19,902	6,325	31,994	14,236	15,237	2,145	18,851	57,847
.....	.....	.....	.....	.....	.....	.....	.....	.....
10,179	2,204	597	6,823	853	3,026	683	2,746	14,297
13,066	3,064	1,021	2,918	1,691	2,810	962	3,679	12,531
.....	.....	.....	656	4	1,987	645	914	2,434
8,678	1,847	682	1,788	1,370	1,849	478	1,166	6,570
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>162,762</b>	<b>27,017</b>	<b>8,625</b>	<b>44,179</b>	<b>18,154</b>	<b>24,909</b>	<b>4,913</b>	<b>27,356</b>	<b>93,679</b>
<b>15,137</b>	<b>1,670</b>	<b>247</b>	<b>6,735</b>	<b>3,377</b>	<b>2,810</b>	<b>509</b>	<b>2,700</b>	<b>10,747</b>
1,128	379	137	543	228	334	138	402	1,195

# Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Etobicoke Twp.	Exeter	Fergus	Finch	Flesherton	Fonthill
Population.....	134,260	2,888	3,861	411	487	2,170
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	12,826,641	215,912	283,761	37,129	33,919	146,672
Accumulated depreciation.....	1,235,175	53,200	45,185	8,143	9,958	22,124
Net fixed assets.....	11,591,466	162,712	238,576	28,986	23,961	124,548
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	90,373	10,250	24,018	2,002	5,753	1,945
Investment in government securities	637,000	10,000	.....	10,000	16,000	.....
Accounts receivable.....	317,621	4,055	2,985	290	184	1,445
Total current assets.....	1,044,994	24,305	27,003	12,292	21,937	3,390
<b>OTHER ASSETS</b>						
Inventory of stores.....	167,066	1,382	605	.....	.....	178
Sinking fund on local debentures...	394,970	.....	.....	.....	.....	.....
Miscellaneous.....	243,002	97	39	.....	.....	1,327
Total other assets.....	805,038	1,479	644	.....	.....	1,505
Equity in Ontario Hydro Systems....	2,756,732	189,069	293,763	21,244	26,323	50,720
	<b>16,198,230</b>	<b>377,565</b>	<b>559,986</b>	<b>62,522</b>	<b>72,221</b>	<b>180,163</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	7,460,200	.....	25,000	.....	.....	19,100
Accounts payable.....	28,998	3,409	.....	158	161	2,615
Other.....	308,513	2,365	3,514	178	164	8,799
Total liabilities.....	7,797,711	5,774	28,514	336	325	30,514
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	2,756,732	189,069	293,763	21,244	26,323	50,720
Other.....	12,053	179	338	.....	.....	.....
Total reserves.....	2,768,785	189,248	294,101	21,244	26,323	50,720
<b>CAPITAL</b>						
Debentures redeemed.....	1,318,595	20,000	50,000	7,000	5,831	42,400
Local sinking fund.....	394,970	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	3,903,826	161,344	185,833	33,942	39,742	56,529
Frequency standardization expense charged this year.....	14,343	1,199	1,538	.....	.....	.....
Total capital.....	5,631,734	182,543	237,371	40,942	45,573	98,929
	<b>16,198,230</b>	<b>377,565</b>	<b>559,986</b>	<b>62,522</b>	<b>72,221</b>	<b>180,163</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	5,728,037	127,790	188,099	11,956	14,578	66,700
Other.....	30,253	2,532	374	509	728	1,311
Total revenue.....	<b>5,758,290</b>	<b>130,322</b>	<b>188,473</b>	<b>12,465</b>	<b>15,306</b>	<b>68,011</b>
<b>EXPENSE</b>						
Power purchased.....	3,694,788	83,270	135,540	8,812	12,123	41,212
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	390,196	11,919	16,866	831	1,166	4,057
Administration.....	316,938	14,570	9,248	1,407	829	4,069
Fixed charges—interest and principal	590,547	10	3,067	.....	.....	4,756
—depreciation.....	268,174	5,985	6,787	1,011	1,041	3,539
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>5,260,643</b>	<b>115,754</b>	<b>171,508</b>	<b>12,061</b>	<b>15,159</b>	<b>57,633</b>
Net income or net expense.....	<b>497,647</b>	<b>14,568</b>	<b>16,965</b>	<b>404</b>	<b>147</b>	<b>10,378</b>
Number of customers.....	46,512	1,194	1,338	178	248	750

Statements for the Year Ended December 31, 1959

Forest 2,056	Forest Hill 19,888	Frankford 1,560	Galt 26,292	Georgetown 9,330	Glencoe 1,118	Goderich 6,119	Grand Bend 846	Grand Valley 651
\$ 123,995 39,116	\$ 1,564,318 438,473	\$ 81,714 12,349	\$ 2,563,208 760,157	\$ 794,413 93,591	\$ 105,362 28,195	\$ 614,254 139,136	\$ 123,029 27,468	\$ 45,267 14,821
84,879	1,125,845	69,365	1,803,051	700,822	77,167	475,118	95,561	30,446
14,569	177,587	16,997	450	77,423	591	21,203	2,000	7,985
43,260	197,047	.....	139,781	4,000	10,700	70,815	.....	5,500
1,448	10,529	706	21,574	5,856	2,658	14,465	2,766	268
59,277	385,163	17,703	161,805	87,279	13,949	106,483	4,766	13,753
5,156	45,033	.....	85,691	40,039	798	4,210	3,730	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	244	.....	1,991	365	32	8,402	7,999	.....
5,156	45,277	.....	87,682	40,404	830	12,612	11,729	.....
146,031	982,531	16,778	2,196,783	467,073	72,659	486,225	35,486	49,737
<b>295,343</b>	<b>2,538,816</b>	<b>103,846</b>	<b>4,249,321</b>	<b>1,295,578</b>	<b>164,605</b>	<b>1,080,438</b>	<b>147,542</b>	<b>93,936</b>
.....	2,683	.....	144,000	327,063	.....	86,500	70,796	.....
632	9,361	.....	1,909	26,057	195	2,315	1,314	297
1,348	39,725	1,359	53,070	34,745	575	11,275	4,219	.....
1,980	51,769	1,359	198,979	387,865	770	100,090	76,329	297
146,031	982,531	16,778	2,196,783	467,073	72,659	486,225	35,486	49,737
.....	562	.....	6,773	500	301	525	100	25
146,031	983,093	16,778	2,203,556	467,573	72,960	486,750	35,586	49,762
23,357	355,484	20,000	674,002	65,000	20,113	134,588	14,204	10,794
.....	.....	.....	.....	.....	.....	.....	.....	.....
123,732	1,142,698	65,709	1,164,629	372,774	70,632	362,225	21,423	33,083
243	5,772	.....	8,155	2,366	130	3,215	.....	.....
147,332	1,503,954	85,709	1,846,786	440,140	90,875	493,598	35,627	43,877
<b>295,343</b>	<b>2,538,816</b>	<b>103,846</b>	<b>4,249,321</b>	<b>1,295,578</b>	<b>164,605</b>	<b>1,080,438</b>	<b>147,542</b>	<b>93,936</b>
74,236	745,380	34,247	1,175,366	386,973	37,100	307,410	61,770	25,068
4,237	13,409	355	8,540	4,237	504	1,907	101	166
<b>78,473</b>	<b>758,789</b>	<b>34,602</b>	<b>1,183,906</b>	<b>391,210</b>	<b>37,604</b>	<b>309,317</b>	<b>61,871</b>	<b>25,234</b>
52,274	452,751	20,118	767,365	247,142	23,289	219,870	31,465	17,632
.....	.....	.....	.....	.....	.....	.....	.....	.....
8,695	57,020	4,270	122,923	16,769	4,931	23,847	5,278	1,630
7,984	66,522	4,076	61,904	28,617	4,523	24,940	8,763	1,708
.....	3,556	2,067	34,285	29,330	101	9,180	6,828	.....
2,266	45,849	1,975	76,189	17,363	3,063	16,548	3,302	1,426
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>71,219</b>	<b>625,698</b>	<b>32,506</b>	<b>1,062,666</b>	<b>339,221</b>	<b>35,907</b>	<b>294,385</b>	<b>55,636</b>	<b>22,396</b>
<b>7,254</b>	<b>133,091</b>	<b>2,096</b>	<b>121,240</b>	<b>51,989</b>	<b>1,697</b>	<b>14,932</b>	<b>6,235</b>	<b>2,838</b>
871	7,307	563	8,615	3,224	487	2,391	816	315



Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Granton	Gravenhurst	Grimsby	Guelph	Hagersville	Hamilton
Population.....	306	3,133	4,725	37,123	2,146	255,833
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	13,867	217,809	262,433	3,260,910	127,708	20,678,092
Accumulated depreciation.....	3,338	50,956	41,212	457,688	30,414	1,511,772
Net fixed assets.....	10,529	166,853	221,221	2,803,222	97,294	19,166,320
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	5,657	110	150	65,419	7,430	2,767,960
Investment in government securities.....		42,000		149,045	18,000	
Accounts receivable.....	212	4,269	5,102	22,835	1,533	1,344,496
Total current assets.....	5,869	46,379	5,252	237,299	26,963	4,112,456
<b>OTHER ASSETS</b>						
Inventory of stores.....		5,336		72,289	108	799,806
Sinking fund on local debentures.....						
Miscellaneous.....	41		200	16,636		23,934
Total other assets.....	41	5,336	200	88,925	108	823,740
Equity in Ontario Hydro Systems.....	24,834	183,018	103,844	2,594,390	264,581	25,558,237
	41,273	401,586	330,517	5,723,836	388,946	49,660,753
<b>LIABILITIES</b>						
Debentures outstanding.....	1,115			1,459,000		1,180,000
Accounts payable.....		1,078	11,962	12,254	387	1,223,347
Other.....	20	2,330	4,670	78,830	1,340	115,269
Total liabilities.....	1,135	3,408	16,632	1,550,084	1,727	2,518,616
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....	24,834	183,018	103,844	2,594,390	264,581	25,558,237
Other.....	56	346		205		271,446
Total reserves.....	24,890	183,364	103,844	2,594,595	264,581	25,829,683
<b>CAPITAL</b>						
Debentures redeemed.....	5,528	44,279	85,344	336,000	8,000	6,505,275
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	9,617	170,535	122,632	1,230,631	121,687	14,723,224
Frequency standardization expense charged this year.....	103		2,065	12,526	7,049	83,955
Total capital.....	15,248	214,814	210,041	1,579,157	122,638	21,312,454
	41,273	401,586	330,517	5,723,836	388,946	49,660,753
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	8,058	115,259	149,339	1,602,816	98,556	14,927,861
Other.....	16	3,974	291	11,207	867	177,922
Total revenue.....	8,074	119,233	149,630	1,614,023	99,423	15,105,783
<b>EXPENSE</b>						
Power purchased.....	4,346	87,651	99,713	1,156,324	69,669	11,213,231
Local generation.....						
Operation and maintenance.....	490	11,905	5,461	174,545	13,075	966,240
Administration.....	1,198	9,223	14,605	120,078	5,632	761,615
Fixed charges—interest and principal.....	307			86,335		113,428
—depreciation.....	395	5,823	6,417	74,752	3,544	458,353
—other.....						
Total expense.....	6,736	114,602	126,196	1,612,034	91,920	13,512,867
Net income or net expense.....	1,338	4,631	23,434	1,989	7,503	1,592,916
Number of customers.....	122	1,306	1,660	11,733	753	76,274

## Statements for the Year Ended December 31, 1959

Hanover	Harriston	Harrow	Hastings	Havelock	Hawkesbury	Hensall	Hespeler	Highgate
4,282	1,639	1,837	896	1,288	8,483	906	4,304	391
\$ 313,344 92,221	\$ 139,690 24,800	\$ 181,905 35,340	\$ 67,317 22,508	\$ 82,402 21,739	\$ 509,672 76,430	\$ 106,072 26,637	\$ 357,914 35,184	\$ 29,988 10,700
221,123	114,890	146,565	44,809	60,663	433,242	79,435	322,730	19,288
40	8,081	5,732	14,499	11,074	12,413	6,727	24,317	793
67,000	6,895	11,000	11,334	37,273	.....	4,000	59,865	3,000
7,187	2,273	1,032	412	717	4,192	1,729	30,638	358
74,227	17,249	17,764	26,245	49,065	16,605	12,456	114,820	4,151
13,471	144	3,998	.....	.....	18,947	70	290	.....
200	110	.....	.....	300	2,165	47	261	359
13,671	254	3,998	.....	300	21,112	117	551	359
329,190	136,736	124,221	25,407	48,331	35,537	69,772	518,242	32,431
<b>638,211</b>	<b>269,129</b>	<b>292,548</b>	<b>96,461</b>	<b>158,359</b>	<b>506,496</b>	<b>161,780</b>	<b>956,343</b>	<b>56,229</b>
.....	2,800	.....	.....	18,000	214,000	.....	.....	.....
6,061	164	18	.....	.....	1,574	38	1,204	1,045
2,610	1,848	1,345	813	527	5,285	280	2,880	145
8,671	4,812	1,363	813	18,527	220,859	318	4,084	1,190
329,190	136,736	124,221	25,407	48,331	35,537	69,772	518,242	32,431
25	.....	37	.....	.....	.....	94	.....	.....
329,215	136,736	124,258	25,407	48,331	35,537	69,866	518,242	32,431
80,162	28,018	12,000	21,000	44,900	71,000	12,000	77,571	5,000
.....	.....	.....	.....	.....	.....	.....	.....	.....
220,163	98,728	154,201	49,241	46,601	179,100	79,441	355,269	17,480
.....	835	726	.....	.....	.....	155	1,177	128
300,325	127,581	166,927	70,241	91,501	250,100	91,596	434,017	22,608
<b>638,211</b>	<b>269,129</b>	<b>292,548</b>	<b>96,461</b>	<b>158,359</b>	<b>506,496</b>	<b>161,780</b>	<b>956,343</b>	<b>56,229</b>
160,347	70,474	82,310	28,135	30,930	195,131	44,419	234,565	11,800
4,505	1,259	1,185	499	1,584	1,009	490	4,144	139
<b>164,852</b>	<b>71,733</b>	<b>83,495</b>	<b>28,634</b>	<b>32,514</b>	<b>196,140</b>	<b>44,909</b>	<b>238,709</b>	<b>11,939</b>
119,801	49,997	52,802	13,668	16,591	85,306	31,450	179,299	8,475
.....	.....	.....	.....	.....	.....	.....	.....	.....
13,260	6,143	7,599	1,952	1,425	21,702	1,119	17,879	1,004
15,239	5,748	6,691	4,378	3,721	30,024	2,496	8,916	897
.....	654	.....	.....	2,185	21,132	7	.....	98
9,325	3,585	4,569	2,117	2,382	12,388	3,026	7,561	987
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>157,625</b>	<b>66,127</b>	<b>71,661</b>	<b>22,115</b>	<b>26,304</b>	<b>170,552</b>	<b>38,098</b>	<b>213,655</b>	<b>11,461</b>
<b>7,227</b>	<b>5,606</b>	<b>11,834</b>	<b>6,519</b>	<b>6,210</b>	<b>25,588</b>	<b>6,811</b>	<b>25,054</b>	<b>478</b>
1,582	660	693	435	441	2,176	357	1,397	164

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Holstein	Huntsville	Ingersoll	Iroquois	Jarvis	Kemptville
Population.....	171	3,241	7,050	1,010	741	1,865
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	11,961	202,265	560,844	193,798	55,521	124,646
Accumulated depreciation.....	2,772	38,023	109,934	7,668	13,731	22,606
Net fixed assets.....	9,189	164,242	450,910	186,130	41,790	102,040
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	2,424	26,710	100	1,168	5,298	6,146
Investment in government securities	1,000	10,000	.....	16,000	.....	12,000
Accounts receivable.....	67	4,522	7,095	1,876	697	3,298
Total current assets.....	3,491	41,232	7,195	19,044	5,995	21,444
<b>OTHER ASSETS</b>						
Inventory of stores.....	.....	6,508	17,052	499	.....	9,626
Sinking fund on local debentures...	.....	.....	.....	.....	.....	.....
Miscellaneous.....	80	167	2,440	.....	.....	.....
Total other assets.....	80	6,675	19,492	499	.....	9,626
Equity in Ontario Hydro Systems....	10,258	266,909	677,931	34,130	53,078	103,643
	23,018	479,058	1,155,528	239,803	100,863	236,753
<b>LIABILITIES</b>						
Debentures outstanding.....	.....	.....	55,665	.....	.....	.....
Accounts payable.....	90	.....	5,056	.....	1,028	4,952
Other.....	42	1,920	10,106	1,790	50	905
Total liabilities.....	132	1,920	70,827	1,790	1,078	5,857
<b>RESERVES</b>						
Equity in Ontario Hydro Systems....	10,258	266,909	677,931	34,130	53,078	103,643
Other.....	.....	.....	346	.....	.....	373
Total reserves.....	10,258	266,909	678,277	34,130	53,078	104,016
<b>CAPITAL</b>						
Debentures redeemed.....	2,762	15,697	104,135	.....	10,500	19,507
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	9,866	194,532	299,003	203,883	38,354	107,373
Frequency standardization expense charged this year.....	.....	.....	3,286	.....	2,147	.....
Total capital.....	12,628	210,229	406,424	203,883	46,707	126,880
	23,018	479,058	1,155,528	239,803	100,863	236,753
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	5,361	145,495	316,391	45,547	18,098	76,466
Other.....	32	1,019	1,778	752	9	790
Total revenue.....	5,393	146,514	318,169	46,299	18,107	77,256
<b>EXPENSE</b>						
Power purchased.....	3,874	94,398	207,770	26,966	13,375	53,503
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	235	15,450	34,166	2,591	580	10,234
Administration.....	679	9,269	25,553	6,956	2,095	5,532
Fixed charges—interest and principal	.....	.....	6,462	.....	.....	84
—depreciation.....	333	5,243	14,922	3,772	1,617	3,057
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	5,121	124,360	288,873	40,285	17,667	72,410
Net income or net expense.....	272	22,154	29,296	6,014	440	4,846
Number of customers.....	94	1,206	2,328	377	269	752

## Statements for the Year Ended December 31, 1959

Kincardine	Kingston	Kingsville	Kirkfield	Kitchener	Lakefield	Lambeth	Lanark	Lancaster
2,701	47,611	3,016	126	69,622	2,031	1,794	880	626
\$ 211,512 53,311	\$ 4,844,686 1,151,965	\$ 242,813 55,069	\$ 19,877 3,503	\$ 8,668,063 1,470,804	\$ 140,277 39,602	\$ 97,062 19,496	\$ 49,385 6,551	\$ 27,248 8,099
158,201	3,692,721	187,744	16,374	7,197,259	100,675	77,566	42,834	19,149
10,924	261,004	1,946	2,058	82,836	11,216	9,903	.....	3,557
32,000	180,000	38,500	2,000	.....	62,000	.....	20,000	9,500
2,229	577,799	1,392	393	329,283	698	1,736	246	504
45,153	1,018,803	41,838	4,451	412,119	73,914	11,639	20,246	13,561
185	205,654	1,463	.....	221,221	6,750	.....	159	.....
32	62,964	205	800	14,083	.....	.....	337	.....
217	268,618	1,668	800	235,304	6,750	.....	496	.....
193,446	1,630,258	171,275	11,375	5,359,566	82,400	50,758	27,570	22,251
<b>397,017</b>	<b>6,610,400</b>	<b>402,525</b>	<b>33,000</b>	<b>13,204,248</b>	<b>263,739</b>	<b>139,963</b>	<b>91,146</b>	<b>54,961</b>
.....	1,403,000	.....	.....	642,800	.....	13,253	.....	.....
228	288,196	11,340	2,385	292,173	.....	.....	3,447	181
946	20,445	3,860	6	113,489	985	1,067	306	473
1,174	1,711,641	15,200	2,391	1,048,462	985	14,320	3,753	654
193,446	1,630,258	171,275	11,375	5,359,566	82,400	50,758	27,570	22,251
40	107,902	376	200	224,481	605	.....	.....	.....
193,486	1,738,160	171,651	11,575	5,584,047	83,005	50,758	27,570	22,251
60,000	401,839	33,500	5,766	1,694,350	33,500	19,247	7,317	8,917
.....	.....	.....	.....	.....	.....	.....	.....	.....
142,357	2,758,760	182,174	13,268	4,861,996	146,249	55,181	52,506	23,139
.....	.....	.....	.....	15,393	.....	457	.....	.....
202,357	3,160,599	215,674	19,034	6,571,739	179,749	74,885	59,823	32,056
<b>397,017</b>	<b>6,610,400</b>	<b>402,525</b>	<b>33,000</b>	<b>13,204,248</b>	<b>263,739</b>	<b>139,963</b>	<b>91,146</b>	<b>54,961</b>
111,492	1,933,615	101,191	6,714	3,547,070	59,546	49,541	13,735	13,396
1,833	29,979	1,970	43	41,495	2,322	83	938	840
<b>113,325</b>	<b>1,963,594</b>	<b>103,161</b>	<b>6,757</b>	<b>3,588,565</b>	<b>61,868</b>	<b>49,624</b>	<b>14,673</b>	<b>14,236</b>
83,478	1,166,685	64,760	3,366	2,046,029	37,477	30,622	9,497	8,342
.....	.....	.....	.....	.....	.....	.....	.....	.....
13,673	189,656	10,930	1,037	386,012	5,974	2,032	1,277	675
6,336	232,670	14,311	588	218,599	8,346	3,719	1,552	2,036
.....	141,083	242	.....	194,347	.....	2,711	.....	.....
5,922	129,553	6,342	514	183,140	4,032	2,452	1,099	494
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>109,409</b>	<b>1,859,647</b>	<b>96,585</b>	<b>5,505</b>	<b>3,028,127</b>	<b>55,829</b>	<b>41,536</b>	<b>13,425</b>	<b>11,547</b>
<b>3,916</b>	<b>103,947</b>	<b>6,576</b>	<b>1,252</b>	<b>560,438</b>	<b>6,039</b>	<b>8,088</b>	<b>1,248</b>	<b>2,689</b>
1,177	15,137	1,247	96	22,229	713	580	323	196



Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Leamington	Lindsay	Listowel	London	London Twp. V. A.	Long Branch
Population.....	8,453	10,404	3,613	100,002		10,728
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	582,158	868,659	349,958	9,655,306	142,252	578,082
Accumulated depreciation.....	136,659	156,283	110,081	2,439,336	30,135	53,578
Net fixed assets.....	445,499	712,376	239,877	7,215,970	112,117	524,504
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	6,329	21,422	34,236	271,281	14,433	7,365
Investment in government securities	2,000	28,995	20,000	306,500		3,000
Accounts receivable.....	6,208	3,627	2,918	457,082	6,086	11,192
Total current assets.....	14,537	54,044	57,154	1,034,863	20,519	21,557
<b>OTHER ASSETS</b>						
Inventory of stores.....	22,837	17,060	482	324,282		
Sinking fund on local debentures.....						
Miscellaneous.....	77		356	9,776	253	
Total other assets.....	22,760	17,060	838	334,058	253	
Equity in Ontario Hydro Systems....	441,012	566,835	322,185	8,564,451	114,222	291,352
	923,808	1,350,315	620,054	17,149,342	247,111	837,413
<b>LIABILITIES</b>						
Debentures outstanding.....	27,500		47,378	443,000	22,231	
Accounts payable.....	176	68	250	330,668	31	37,968
Other.....	10,065	7,543	5,152	99,847	2,449	9,365
Total liabilities.....	37,741	7,611	52,780	873,515	24,711	47,333
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	441,012	566,835	322,185	8,564,451	114,222	291,352
Other.....	533	18,206		287,065		1,147
Total reserves.....	441,545	585,041	322,185	8,851,516	114,222	292,499
<b>CAPITAL</b>						
Debentures redeemed.....	58,500	130,000	65,812	1,788,900	29,536	40,305
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.	383,122	627,663	177,820	5,627,094	77,999	454,945
Frequency standardization expense charged this year.....	2,900		1,457	8,317	643	2,331
Total capital.....	444,522	757,663	245,089	7,424,311	108,178	497,581
	923,808	1,350,315	620,054	17,149,342	247,111	837,413
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	334,639	411,026	155,541	3,881,312	80,038	363,042
Other.....	1,863	19,728	1,259	125,893	604	193
Total revenue.....	336,502	430,754	156,800	4,007,205	80,642	363,235
<b>EXPENSE</b>						
Power purchased.....	224,035	257,359	110,839	2,341,823	57,761	243,320
Local generation.....						
Operation and maintenance.....	24,752	47,620	15,393	424,599	4,036	30,299
Administration.....	35,624	41,943	10,193	356,024	7,903	30,484
Fixed charges—interest and principal	3,982		6,518	45,297	3,017	3,260
—depreciation.....	15,242	23,030	6,468	269,118	3,822	12,690
—other.....						
Total expense.....	303,635	369,952	149,411	3,436,861	76,539	320,053
Net income or net expense.....	32,867	60,802	7,389	570,344	4,103	43,182
Number of customers.....	3,273	3,695	1,459	32,319	958	4,108

## Statements for the Year Ended December 31, 1959

L'Original	Lucan	Lucknow	Lynden	Madoc	Magneta- wan	Markdale	Markham	Marmora
1,134	930	1,012	538	1,469	253	1,044	4,213	1,370
\$ 70,052 20,519	\$ 73,168 21,287	\$ 85,253 12,235	\$ 31,145 9,106	\$ 123,694 29,469	\$ 23,535 5,865	\$ 61,633 10,223	\$ 266,544 43,433	\$ 84,348 28,169
49,533	51,881	73,018	22,039	94,225	17,670	51,410	223,111	56,179
16,583	5,079	8,211	6,089	18,167	8,170	10,704	11,028	6,403
.....	5,500	9,000	2,000	21,663	3,000	.....	.....	3,000
87	373	694	1,659	1,752	32	223	3,748	563
16,670	10,952	17,905	9,748	41,582	11,202	10,927	14,776	9,966
.....	40	.....	.....	4,555	100	.....	1,358	1,766
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,878	.....	1,300	.....	.....	351	.....	264	.....
1,878	40	1,300	.....	4,555	451	.....	1,622	1,766
5,828	68,131	83,101	41,697	54,244	2,423	47,706	108,163	37,823
<b>73,909</b>	<b>131,004</b>	<b>175,324</b>	<b>73,484</b>	<b>194,606</b>	<b>31,746</b>	<b>110,043</b>	<b>347,672</b>	<b>105,734</b>
21,000	.....	.....	.....	.....	16,800	.....	50,363	.....
109	26	1,212	220	.....	4	422	5,262	.....
330	669	.....	7	1,086	.....	567	4,705	1,070
21,439	695	1,212	227	1,086	16,804	989	60,330	1,070
5,828	68,131	83,101	41,697	54,244	2,423	47,706	108,163	37,823
.....	.....	280	.....	.....	.....	.....	300	.....
5,828	68,131	83,381	41,697	54,244	2,423	47,706	108,463	37,823
7,000	11,214	17,614	4,495	14,000	7,200	6,370	18,453	15,092
.....	.....	.....	.....	.....	.....	.....	.....	.....
39,642	50,642	73,117	26,794	125,276	5,319	54,978	160,180	51,749
.....	322	.....	271	.....	.....	.....	246	.....
46,642	62,178	90,731	31,560	139,276	12,519	61,348	178,879	66,841
<b>73,909</b>	<b>131,004</b>	<b>175,324</b>	<b>73,484</b>	<b>194,606</b>	<b>31,746</b>	<b>110,043</b>	<b>347,672</b>	<b>105,734</b>
24,557	31,787	39,598	16,196	43,149	6,773	33,002	138,856	45,030
319	376	275	281	491	177	7	624	352
<b>24,876</b>	<b>32,163</b>	<b>39,873</b>	<b>16,477</b>	<b>43,640</b>	<b>6,950</b>	<b>33,009</b>	<b>139,480</b>	<b>45,382</b>
11,793	21,874	27,074	10,787	29,545	3,200	23,527	97,657	26,915
.....	.....	.....	.....	.....	.....	.....	.....	.....
2,878	1,175	2,346	216	1,800	545	2,648	7,454	5,281
2,628	2,072	3,774	1,444	4,141	644	1,723	10,956	3,784
2,102	1	.....	2	3	1,925	.....	7,494	.....
2,111	2,164	2,086	931	3,433	609	1,573	6,564	1,595
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>21,512</b>	<b>27,286</b>	<b>35,280</b>	<b>13,380</b>	<b>38,922</b>	<b>6,923</b>	<b>29,471</b>	<b>130,125</b>	<b>37,575</b>
<b>3,364</b>	<b>4,877</b>	<b>4,593</b>	<b>3,097</b>	<b>4,718</b>	<b>27</b>	<b>3,538</b>	<b>9,355</b>	<b>7,807</b>
343	356	453	165	585	104	421	1,306	521

# Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Martintown	Maxville	Meaford	Merlin	Merrick- ville	Merritton
Population.....	430	821	3,660	537	885	6,236
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	26,713	63,470	260,724	62,510	71,528	590,701
Accumulated depreciation.....	6,147	9,476	54,933	20,861	6,325	79,930
Net fixed assets.....	20,566	53,994	205,791	41,649	65,203	510,771
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	7,095	4,323	27,567	8,471	3,522	38,098
Investment in government securities.....		1,500				87,000
Accounts receivable.....	1,608	570	2,034	593	4,415	6,966
Total current assets.....	8,703	6,393	29,601	9,064	7,937	132,064
<b>OTHER ASSETS</b>						
Inventory of stores.....			6,074	753		22,599
Sinking fund on local debentures.....						
Miscellaneous.....			756		352	283
Total other assets.....			6,830	753	352	22,882
Equity in Ontario Hydro Systems.....	10,140	38,570	173,646	38,623	12,498	1,142,146
	<b>39,409</b>	<b>98,957</b>	<b>415,868</b>	<b>90,089</b>	<b>85,990</b>	<b>1,807,863</b>
<b>LIABILITIES</b>						
Debentures outstanding.....					15,800	
Accounts payable.....	384		651	4	2,443	821
Other.....	98	127	5,193	153	840	2,635
Total liabilities.....	482	127	5,844	157	19,083	3,456
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....	10,140	38,570	173,646	38,623	12,498	1,142,146
Other.....	81	265	100	14		
Total reserves.....	10,221	38,835	173,746	38,637	12,498	1,142,146
<b>CAPITAL</b>						
Debentures redeemed.....	5,347	13,642	47,725	13,122	9,200	32,186
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	23,359	46,353	188,553	37,902	45,209	630,075
Frequency standardization expense charged this year.....				271		
Total capital.....	28,706	59,995	236,278	51,295	54,409	662,261
	<b>39,409</b>	<b>98,957</b>	<b>415,868</b>	<b>90,089</b>	<b>85,990</b>	<b>1,807,863</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	10,072	23,363	140,710	18,556	24,336	792,100
Other.....	67	236	1,919	3,181	109	4,949
Total revenue.....	<b>10,139</b>	<b>23,599</b>	<b>142,629</b>	<b>21,737</b>	<b>24,445</b>	<b>797,049</b>
<b>EXPENSE</b>						
Power purchased.....	5,133	16,354	99,243	11,174	14,841	668,384
Local generation.....						
Operation and maintenance.....	507	1,648	10,118	1,252	2,584	27,335
Administration.....	847	1,118	11,636	4,307	2,435	28,689
Fixed charges—interest and principal.....				1	1,795	
—depreciation.....	691	1,533	6,855	1,975	1,570	13,303
—other.....						
Total expense.....	<b>7,178</b>	<b>20,653</b>	<b>127,852</b>	<b>18,709</b>	<b>23,225</b>	<b>737,711</b>
Net income or net expense.....	<b>2,961</b>	<b>2,946</b>	<b>14,777</b>	<b>3,028</b>	<b>1,220</b>	<b>59,338</b>
Number of customers.....	124	314	1,499	250	367	1,920

Statements for the Year Ended December 31, 1959

Midland	Mildmay	Millbrook	Milton	Milverton	Mimico	Mitchell	Moorefield	Morrisburg
8,394	847	842	5,148	1,083	15,516	2,147	318	1,905
\$ 672,777 231,099	\$ 43,873 5,566	\$ 52,602 9,881	\$ 497,525 76,123	\$ 79,787 15,503	\$ 897,800 204,077	\$ 225,240 54,859	\$ 22,463 5,815	\$ 207,919 20,818
441,678	38,307	42,721	421,402	64,284	693,723	170,381	16,648	187,101
16,280	2,239	9,196	4,787	7,619	96,274	150	1,910	39,279
140,000	12,500	11,000	.....	12,932	115,000	37,927	970	11,000
48,505	6	347	4,009	780	22,615	6,855	219	6,032
204,785	14,745	20,543	8,796	21,331	233,889	44,932	3,099	56,311
9,219	.....	983	3,997	45	7,162	10,237	20	5,463
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,991	.....	1,189	604	240	1,669	315	456	.....
11,210	.....	2,172	4,601	285	8,831	10,552	476	5,463
803,499	27,262	19,039	386,003	140,812	601,149	174,979	23,060	53,734
<b>1,461,172</b>	<b>80,314</b>	<b>84,475</b>	<b>820,802</b>	<b>226,712</b>	<b>1,537,592</b>	<b>400,844</b>	<b>43,283</b>	<b>302,609</b>
.....	.....	.....	75,854	12,400	87,000	17,300	.....	.....
2,199	6	.....	470	.....	31,924	367	1,525	500
2,730	261	896	7,073	241	43,544	1,352	502	2,788
4,929	267	896	83,397	12,641	162,468	19,019	2,027	3,288
803,499	27,262	19,039	386,003	140,812	601,149	174,979	23,060	53,734
441	.....	.....	454	.....	823	860	.....	.....
803,940	27,262	19,039	386,457	140,812	601,972	175,839	23,060	53,734
111,945	12,303	9,000	48,317	12,100	164,074	29,995	4,500	31,636
.....	.....	.....	.....	.....	.....	.....	.....	.....
540,358	40,482	55,540	301,017	60,667	606,224	175,271	13,606	213,951
.....	.....	.....	1,614	492	2,854	720	90	.....
652,303	52,785	64,540	350,948	73,259	773,152	205,986	18,196	245,587
<b>1,461,172</b>	<b>80,314</b>	<b>84,475</b>	<b>820,802</b>	<b>226,712</b>	<b>1,537,592</b>	<b>400,844</b>	<b>43,283</b>	<b>302,609</b>
309,346	24,601	22,116	246,786	52,037	433,658	98,950	9,824	75,326
10,214	487	545	1,508	638	12,637	2,482	45	2,550
<b>319,560</b>	<b>25,088</b>	<b>22,661</b>	<b>248,294</b>	<b>52,675</b>	<b>446,295</b>	<b>101,432</b>	<b>9,869</b>	<b>77,876</b>
227,859	17,591	14,786	170,692	35,909	282,075	62,891	7,325	45,775
.....	.....	.....	.....	.....	.....	.....	.....	.....
32,018	2,593	1,769	13,747	5,256	42,449	8,397	1,007	10,768
22,054	1,895	2,499	21,486	4,762	60,678	10,656	611	13,782
.....	.....	.....	7,149	1,288	9,575	1,843	2	.....
12,794	1,058	1,336	11,506	2,057	23,890	5,964	638	3,661
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>294,725</b>	<b>23,137</b>	<b>20,390</b>	<b>224,580</b>	<b>49,272</b>	<b>418,667</b>	<b>89,751</b>	<b>9,583</b>	<b>73,986</b>
<b>24,835</b>	<b>1,951</b>	<b>2,271</b>	<b>23,714</b>	<b>3,403</b>	<b>27,628</b>	<b>11,681</b>	<b>286</b>	<b>3,890</b>
2,810	314	331	1,659	468	6,063	891	128	743



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Mount Brydges 902	Mount Forest 2,514	Napanee 4,480	Neustadt 492	Newboro 296	Newburgh 557
Population.....						
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	52,964	166,289	326,847	36,077	28,518	48,331
Accumulated depreciation.....	9,530	34,692	65,971	13,006	4,872	16,203
Net fixed assets.....	43,434	131,597	260,876	23,071	23,646	32,128
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	13,527	13,588	100	825	240	4,149
Investment in government securities.....		20,000	27,000	21,200	5,000	3,000
Accounts receivable.....	506	980	26,082	256	289	239
Total current assets.....	14,033	34,568	53,182	22,281	5,529	7,388
<b>OTHER ASSETS</b>						
Inventory of stores.....		1,947	9,140			
Sinking fund on local debentures.....						
Miscellaneous.....	475	100	4,202		2,331	
Total other assets.....	475	2,047	13,342		2,331	
Equity in Ontario Hydro Systems.....	30,340	146,196	242,073	23,864	2,825	6,966
	<b>88,282</b>	<b>314,408</b>	<b>569,473</b>	<b>69,216</b>	<b>34,331</b>	<b>46,482</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	15,000				9,747	4,400
Accounts payable.....	1,710	97	14,974	179	1,143	
Other.....	392	600	5,192	214	144	261
Total liabilities.....	17,102	697	20,166	393	11,034	4,661
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	30,340	146,196	242,073	23,864	2,825	6,966
Other.....	94					
Total reserves.....	30,434	146,196	242,073	23,864	2,825	6,966
<b>CAPITAL</b>						
Debentures redeemed.....	4,220	21,627	70,000	15,504	7,253	9,600
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds..	36,451	145,888	237,234	29,455	13,219	25,255
Frequency standardization expense charged this year.....	75					
Total capital.....	40,746	167,515	307,234	44,959	20,472	34,855
	<b>88,282</b>	<b>314,408</b>	<b>569,473</b>	<b>69,216</b>	<b>34,331</b>	<b>46,482</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	21,282	88,278	166,800	10,208	7,212	17,301
Other.....	3	1,120	11,459	906	199	95
Total revenue.....	<b>21,285</b>	<b>89,398</b>	<b>178,259</b>	<b>11,114</b>	<b>7,411</b>	<b>17,396</b>
<b>EXPENSE</b>						
Power purchased.....	12,796	62,305	124,365	8,716	3,016	8,876
Local generation.....						
Operation and maintenance.....	1,100	6,910	17,574	1,190	1,064	470
Administration.....	2,720	6,442	25,718	1,753	938	1,759
Fixed charges—interest and principal	363		8		1,145	854
—depreciation.....	1,355	4,303	8,040	730	725	932
—other.....						
Total expense.....	<b>18,334</b>	<b>79,960</b>	<b>175,705</b>	<b>12,389</b>	<b>6,888</b>	<b>12,891</b>
Net income or net expense.....	<b>2,951</b>	<b>9,438</b>	<b>2,554</b>	<b>1,275</b>	<b>523</b>	<b>4,505</b>
Number of customers.....	355	974	1,670	204	140	185

Statements for the Year Ended December 31, 1959

Newbury 335	Newcastle 1,132	New Hamburg 2,063	Newmarket 7,739	New Toronto 11,532	Niagara 2,658	Niagara Falls 23,660	North York Twp. 224,959	Norwich 1,706
\$ 19,812 9,398	\$ 115,304 41,371	\$ 140,461 27,457	\$ 525,726 111,774	\$ 896,139 148,342	\$ 242,201 39,484	\$ 2,156,378 505,646	\$ 17,350,696 2,057,843	\$ 98,721 25,928
10,414	73,933	113,004	413,952	747,797	202,717	1,650,732	15,292,853	72,793
5,857	3,597	12,348	71,372	141,080	9,414	53,652	412,733	49
6,500	10,500	15,000	.....	30,000	10,000	55,000	10,000	7,500
450	1,273	2,089	8,923	15,470	4,186	45,884	129,936	3,515
12,807	15,370	29,437	80,295	186,550	23,600	154,536	552,669	11,064
.....	1,643	2,022	.....	19,947	12,475	107,363	482,948	5,198
.....	.....	.....	.....	.....	.....	.....	326,889	.....
.....	144	1,357	332	1,331	49	910	161,980	153
.....	1,787	3,379	332	21,278	12,524	108,273	971,817	5,351
15,771	36,625	172,207	184,429	1,970,732	147,705	2,141,907	3,513,180	127,338
<b>38,992</b>	<b>127,715</b>	<b>318,027</b>	<b>679,008</b>	<b>2,926,357</b>	<b>386,546</b>	<b>4,055,448</b>	<b>20,330,519</b>	<b>216,546</b>
.....	11,500	11,000	63,723	.....	25,417	.....	6,463,261	.....
12	686	802	603	480	19	7	260,143	5,996
100	.....	277	6,643	18,986	2,487	43,911	635,056	1,416
112	12,186	12,079	70,969	19,466	27,923	43,918	7,358,460	7,412
15,771	36,625	172,207	184,429	1,970,732	147,705	2,141,907	3,513,180	127,338
.....	.....	34	3,300	800	404	566	13,935	150
15,771	36,625	172,241	187,729	1,971,532	148,109	2,142,473	3,527,115	127,488
9,754	14,000	21,729	31,193	8,000	55,090	690,243	2,211,216	13,756
.....	.....	.....	.....	.....	.....	.....	326,889	.....
14,104	64,904	111,328	388,532	924,427	154,044	1,172,090	6,869,119	66,858
749	.....	650	585	2,932	1,380	6,724	37,720	1,032
23,109	78,904	133,707	420,310	935,359	210,514	1,869,057	9,444,944	81,646
<b>38,992</b>	<b>127,715</b>	<b>318,027</b>	<b>679,008</b>	<b>2,926,357</b>	<b>386,546</b>	<b>4,055,448</b>	<b>20,330,519</b>	<b>216,546</b>
6,923	44,938	75,248	325,709	1,266,280	101,545	987,926	8,494,258	61,081
344	771	1,045	463	7,199	703	8,683	99,594	2,486
<b>7,267</b>	<b>45,709</b>	<b>76,293</b>	<b>326,172</b>	<b>1,273,479</b>	<b>102,248</b>	<b>996,609</b>	<b>8,593,852</b>	<b>63,567</b>
4,476	26,795	49,135	209,649	1,060,793	64,759	603,891	5,103,076	37,757
.....	.....	.....	.....	.....	.....	.....	.....	.....
567	5,059	5,969	17,814	35,895	15,623	135,348	620,038	8,845
525	4,851	4,946	18,198	53,096	7,886	69,948	720,035	6,668
.....	.....	1,480	6,429	.....	2,568	.....	617,479	139
467	1,994	3,587	14,107	22,465	6,041	59,312	385,229	2,552
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>6,035</b>	<b>38,699</b>	<b>65,117</b>	<b>266,197</b>	<b>1,172,249</b>	<b>96,877</b>	<b>868,499</b>	<b>7,445,857</b>	<b>55,961</b>
<b>1,232</b>	<b>7,010</b>	<b>11,176</b>	<b>59,975</b>	<b>101,230</b>	<b>5,371</b>	<b>128,110</b>	<b>1,147,995</b>	<b>7,606</b>
131	460	686	2,629	3,988	1,060	7,513	74,924	682

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Norwood	Oakville	Oil Springs	Omemees	Orangeville	Orillia
Population.....	1,077	10,147	483	838	4,610	14,282
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	97,503	1,181,610	58,365	64,158	276,672	4,307,972
Accumulated depreciation.....	26,080	211,862	19,608	20,161	59,194	856,396
Net fixed assets.....	71,423	969,748	38,757	43,997	217,478	3,451,576
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	11,493	117,006	1,318	1,159	70	22,861
Investment in government securities	15,000	.....	11,000	11,000	100	101,794
Accounts receivable.....	2,872	31,478	109	11	4,765	55,172
Total current assets.....	29,365	148,484	12,427	12,170	4,935	179,827
<b>OTHER ASSETS</b>						
Inventory of stores.....	.....	47,550	634	2,991	5,392	74,161
Sinking fund on local debentures...	.....	.....	.....	.....	.....	.....
Miscellaneous.....	3,970	7,103	2,386	.....	140	1,300
Total other assets.....	3,970	54,653	3,020	2,991	5,532	75,461
Equity in Ontario Hydro Systems...	36,341	237,701	70,623	21,268	210,529	79,012
	<b>141,099</b>	<b>1,410,586</b>	<b>124,827</b>	<b>80,426</b>	<b>438,474</b>	<b>3,785,876</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	.....	337,000	.....	.....	.....	889,000
Accounts payable.....	.....	4,613	240	2,000	18,296	3,220
Other.....	874	40,285	40	219	2,893	15,063
Total liabilities.....	874	381,898	280	2,219	21,189	907,283
<b>RESERVES</b>						
Equity in Ontario Hydro Systems...	36,341	237,701	70,623	21,268	210,529	79,012
Other.....	.....	264	.....	45	50	101,794
Total reserves.....	36,341	237,965	70,623	21,313	210,579	180,806
<b>CAPITAL</b>						
Debentures redeemed.....	55,100	87,202	16,721	12,000	25,594	1,573,000
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	48,784	703,521	37,149	44,894	181,112	1,124,787
Frequency standardization expense charged this year.....	.....	.....	54	.....	.....	.....
Total capital.....	103,884	790,723	53,924	56,894	206,706	2,697,787
	<b>141,099</b>	<b>1,410,586</b>	<b>124,827</b>	<b>80,426</b>	<b>438,474</b>	<b>3,785,876</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	34,895	559,652	16,050	23,469	168,691	716,446
Other.....	517	7,795	1,585	570	467	6,282
Total revenue.....	<b>35,412</b>	<b>567,447</b>	<b>17,635</b>	<b>24,039</b>	<b>169,158</b>	<b>722,728</b>
<b>EXPENSE</b>						
Power purchased.....	20,994	331,679	10,407	14,384	116,700	158,778
Local generation.....	.....	.....	.....	.....	.....	133,132
Operation and maintenance.....	2,369	34,240	2,547	4,288	10,804	108,913
Administration.....	2,554	48,736	2,665	2,050	11,908	74,320
Fixed charges—interest and principal	1,000	34,872	.....	30	849	100,165
—depreciation.....	2,847	29,665	1,141	1,213	7,346	81,289
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>29,764</b>	<b>479,192</b>	<b>16,760</b>	<b>21,965</b>	<b>147,607</b>	<b>656,597</b>
Net income or net expense.....	<b>5,648</b>	<b>88,255</b>	<b>875</b>	<b>2,074</b>	<b>21,551</b>	<b>66,131</b>
Number of customers.....	408	3,552	223	305	1,652	5,334

## Statements for the Year Ended December 31, 1959

Orono	Oshawa	Ottawa	Otterville	Owen Sound	Paisley	Palmerston	Paris	Parkhill
859	57,683	247,053	729	17,549	768	1,577	5,759	1,115
\$	\$	\$	\$	\$	\$	\$	\$	\$
61,754	5,920,265	27,471,916	50,768	1,286,422	63,734	163,036	492,762	113,795
11,987	1,043,975	5,867,192	17,721	207,387	15,470	40,497	119,221	17,125
49,767	4,876,290	21,604,724	33,047	1,079,035	48,264	122,539	373,541	96,670
557	83,460	92,495	1,891	25,037	11,062	2,381	8,681	4,447
10,000	598,351	543,000	.....	143,151	8,000	.....	.....	6,000
326	254,794	791,877	565	52,139	268	2,163	4,534	2,584
10,883	936,605	1,427,372	2,456	220,327	19,330	4,544	13,215	13,031
2,465	111,824	433,076	.....	47,724	44	9,611	425	2,281
40	10,764	100,228	5	749	.....	.....	1,494	111
2,505	122,588	533,304	5	48,473	44	9,611	1,919	2,392
17,576	3,261,799	4,855,039	35,234	1,035,339	44,639	155,149	408,900	78,319
<b>80,731</b>	<b>9,197,282</b>	<b>28,420,439</b>	<b>70,742</b>	<b>2,383,174</b>	<b>112,277</b>	<b>291,843</b>	<b>797,575</b>	<b>190,412</b>
.....	391,000	5,797,000	.....	45,000	.....	.....	93,500	9,200
1,789	240,082	749,257	31	78,624	586	15,352	1,412	2,835
330	82,518	882	179	20,041	372	636	2,457	623
2,119	713,600	6,547,139	210	143,665	958	15,988	97,369	12,658
17,576	3,261,799	4,855,039	35,234	1,035,339	44,639	155,149	408,900	78,319
.....	8,990	457,817	14	1,821	.....	37	160	.....
17,576	3,270,789	5,312,856	35,248	1,037,160	44,639	155,186	409,060	78,319
8,000	411,622	4,183,000	4,500	162,718	13,623	27,000	103,500	20,521
.....	.....	.....	.....	.....	.....	.....	.....	.....
53,036	4,801,271	12,377,444	30,402	1,039,631	53,057	92,909	186,582	78,480
.....	.....	.....	382	.....	.....	760	1,064	434
61,036	5,212,893	16,560,444	35,284	1,202,349	66,680	120,669	291,146	99,435
<b>80,731</b>	<b>9,197,282</b>	<b>28,420,439</b>	<b>70,742</b>	<b>2,383,174</b>	<b>112,277</b>	<b>291,843</b>	<b>797,575</b>	<b>190,412</b>
26,573	2,620,595	9,514,931	20,979	605,567	25,679	59,914	194,616	50,467
804	52,396	225,626	49	19,859	478	864	440	538
<b>27,377</b>	<b>2,672,991</b>	<b>9,740,557</b>	<b>21,028</b>	<b>625,426</b>	<b>26,157</b>	<b>60,778</b>	<b>195,056</b>	<b>51,005</b>
15,413	1,842,973	5,427,080	13,922	373,981	14,897	41,356	122,771	32,449
.....	.....	213,622	.....	.....	.....	.....	.....	.....
3,127	161,245	910,238	976	72,222	1,991	5,377	19,893	4,912
5,189	168,329	678,641	1,776	70,727	3,020	7,053	12,597	5,159
5	31,870	543,079	35	8,871	.....	62	8,728	1,047
1,544	145,751	685,365	1,632	30,236	1,806	4,312	13,741	2,745
.....	.....	14,316	.....	.....	.....	.....	.....	.....
<b>25,278</b>	<b>2,350,168</b>	<b>8,472,341</b>	<b>18,341</b>	<b>556,037</b>	<b>21,714</b>	<b>58,160</b>	<b>177,730</b>	<b>46,312</b>
<b>2,099</b>	<b>322,823</b>	<b>1,268,216</b>	<b>2,687</b>	<b>69,389</b>	<b>4,443</b>	<b>2,618</b>	<b>17,326</b>	<b>4,693</b>
347	18,541	84,416	285	6,081	324	616	1,952	497



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Parry Sound	Pene- tanguishene	Perth	Peter- borough	Petrolia	Pickering
Population.....	6,070	4,692	5,579	45,248	3,649	1,754
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	821,014	272,939	345,244	5,068,308	298,442	107,891
Accumulated depreciation.....	195,567	83,358	98,478	1,116,919	83,585	16,102
Net fixed assets.....	625,447	189,581	246,766	3,951,389	214,857	91,789
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	9,486	17,372	18,354	137,953	14,117	764
Investment in government securities	16,316	55,000	81,000	.....	15,053	.....
Accounts receivable.....	1,996	1,367	1,721	122,984	15,645	1,573
Total current assets.....	27,798	73,739	101,075	260,937	44,815	2,337
<b>OTHER ASSETS</b>						
Inventory of stores.....	1,950	344	8,737	64,280	15,799	.....
Sinking fund on local debentures...	.....	.....	.....	.....	.....	.....
Miscellaneous.....	.....	829	.....	4,808	566	3,465
Total other assets.....	1,950	1,173	8,737	69,088	16,365	3,465
Equity in Ontario Hydro Systems.....	48,988	237,640	317,418	2,156,452	324,449	1,592
	<b>704,183</b>	<b>502,133</b>	<b>673,996</b>	<b>6,437,866</b>	<b>600,486</b>	<b>99,183</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	71,309	.....	.....	978,600	.....	76,000
Accounts payable.....	.....	462	.....	130,268	3,685	1,674
Other.....	8,060	1,666	4,362	4,246	4,096	1,430
Total liabilities.....	79,369	2,128	4,362	1,113,114	7,781	79,104
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	48,988	237,640	317,418	2,156,452	324,449	1,592
Other.....	146	913	159	1,376	14	.....
Total reserves.....	49,134	238,553	317,577	2,157,828	324,463	1,592
<b>CAPITAL</b>						
Debentures redeemed.....	399,500	36,983	85,045	781,011	50,000	4,000
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	176,180	224,469	267,012	2,385,913	217,801	14,487
Frequency standardization expense charged this year.....	.....	.....	.....	.....	441	.....
Total capital.....	575,680	261,452	352,057	3,166,924	268,242	18,487
	<b>704,183</b>	<b>502,133</b>	<b>673,996</b>	<b>6,437,866</b>	<b>600,486</b>	<b>99,183</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	179,967	119,022	167,740	1,947,840	115,456	53,100
Other.....	1,341	3,645	5,026	7,169	3,222	357
<b>Total revenue.....</b>	<b>181,308</b>	<b>122,667</b>	<b>172,766</b>	<b>1,955,009</b>	<b>118,678</b>	<b>53,457</b>
<b>EXPENSE</b>						
Power purchased.....	69,957	82,120	123,599	1,173,166	59,942	27,144
Local generation.....	35,142	.....	.....	.....	.....	.....
Operation and maintenance.....	20,293	14,825	13,548	226,583	18,743	2,255
Administration.....	24,580	10,651	20,491	150,155	19,525	3,570
Fixed charges—interest and principal	6,066	.....	.....	93,831	.....	6,298
—depreciation.....	16,038	8,407	5,976	134,146	8,701	2,473
—other.....	.....	.....	.....	.....	.....	.....
<b>Total expense.....</b>	<b>172,076</b>	<b>116,003</b>	<b>163,614</b>	<b>1,777,881</b>	<b>106,911</b>	<b>41,740</b>
<b>Net income or net expense.....</b>	<b>9,232</b>	<b>6,664</b>	<b>9,152</b>	<b>177,128</b>	<b>11,767</b>	<b>11,717</b>
Number of customers.....	1,949	1,389	1,962	14,487	1,287	485

Statements for the Year Ended December 31, 1959

Pictou 5,072	Plattsville 477	Point Edward 2,688	Port Burwell 722	Port Colborne 14,936	Port Credit 6,445	Port Dalhousie 3,337	Port Dover 3,080	Port Elgin 1,692
\$ 405,822 102,210	\$ 44,347 1,671	\$ 241,925 46,812	\$ 71,563 26,255	\$ 966,560 79,744	\$ 588,420 77,397	\$ 224,623 20,633	\$ 277,145 66,301	\$ 175,147 24,336
303,612	42,676	195,113	45,308	886,816	511,023	203,990	210,844	150,811
4,180	5,130	19,446	5,325	20,979	10,075	11,644	10,430	4,353
3,000	4,500	49,224	.....	10,000	61,416	.....	.....	1,500
1,339	687	2,943	833	8,889	9,247	3,216	3,392	1,512
8,519	10,317	71,613	6,158	39,868	80,738	14,860	13,822	7,365
11,859	14	819	64	12,452	5,123	6,785	256	2,662
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	583	1,171	10,087	3,715	485	561	.....
11,859	14	1,402	1,235	22,539	8,838	7,270	817	2,662
273,116	44,262	316,980	16,113	509,156	282,076	164,624	129,452	90,246
<b>597,106</b>	<b>97,269</b>	<b>585,108</b>	<b>68,814</b>	<b>1,458,379</b>	<b>882,675</b>	<b>390,744</b>	<b>354,935</b>	<b>251,084</b>
32,932	.....	.....	34,200	126,062	56,985	22,500	71,886	.....
5,763	3,518	4,671	57	9,317	9,791	1,009	466	1,144
11,359	.....	1,624	3,266	11,670	21,154	2,949	8,179	.....
50,054	3,518	6,295	37,523	147,049	87,930	26,458	80,531	1,144
273,116	44,262	316,980	16,113	509,156	282,076	164,624	129,452	90,246
55	.....	100	.....	.....	742	125	.....	103
273,171	44,262	317,080	16,113	509,156	282,818	164,749	129,452	90,349
30,250	5,237	17,000	5,800	216,938	81,254	47,000	37,114	37,787
.....	.....	.....	.....	.....	.....	.....	.....	.....
243,631	45,942	244,570	14,289	579,223	429,015	151,138	122,654	121,804
.....	1,690	163	4,911	6,013	1,658	1,399	14,816	.....
273,881	49,489	261,733	15,178	802,174	511,927	199,537	144,952	159,591
<b>597,106</b>	<b>97,269</b>	<b>585,108</b>	<b>68,814</b>	<b>1,458,379</b>	<b>882,675</b>	<b>390,744</b>	<b>354,935</b>	<b>251,084</b>
181,209	29,059	175,801	23,020	392,912	539,434	105,291	119,453	83,854
1,467	288	4,796	10	4,584	4,103	986	117	543
<b>182,676</b>	<b>29,347</b>	<b>180,597</b>	<b>23,030</b>	<b>397,496</b>	<b>543,537</b>	<b>106,277</b>	<b>119,570</b>	<b>84,397</b>
120,353	25,239	148,271	9,322	213,589	396,595	58,960	71,640	46,409
.....	.....	.....	.....	.....	.....	.....	.....	.....
15,002	660	6,848	3,741	51,672	14,665	15,975	11,898	10,658
16,198	549	19,763	3,294	50,583	25,776	15,526	9,028	10,240
7,400	.....	11	2,944	15,902	12,738	4,684	6,418	.....
11,166	999	6,108	2,360	21,462	12,864	4,591	7,658	4,073
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>170,119</b>	<b>27,447</b>	<b>181,001</b>	<b>21,661</b>	<b>353,208</b>	<b>462,638</b>	<b>99,736</b>	<b>106,642</b>	<b>71,380</b>
<b>12,557</b>	<b>1,900</b>	<b>404</b>	<b>1,369</b>	<b>44,288</b>	<b>80,899</b>	<b>6,541</b>	<b>12,928</b>	<b>13,017</b>
1,922	190	808	450	4,672	2,670	1,084	1,525	1,038

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Port Hope	Port McNicoll	Port Perry	Port Rowan	Port Stanley	Prescott
Population.....	7,850	1,010	2,210	809	1,530	5,351
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plant and facilities at cost.....	641,504	69,051	136,283	54,456	171,116	296,991
Accumulated depreciation.....	128,543	11,867	23,004	10,268	51,814	80,466
Net fixed assets.....	512,961	57,184	113,279	44,188	119,302	216,525
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	104,602	6,646	21,498	-7,124	1,830	.....
Investment in government securities.....	.....	26,000	16,000	.....	9,000	30,000
Accounts receivable.....	3,312	6,900	439	1,218	1,967	3,739
Total current assets.....	107,914	39,546	37,937	8,342	12,797	33,739
<b>OTHER ASSETS</b>						
Inventory of stores.....	35,010	1,383	47	221	.....	8,919
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	.....	.....	243	.....	220	190
Total other assets.....	35,010	1,383	290	221	220	9,109
Equity in Ontario Hydro Systems.....	449,738	54,161	86,036	29,536	156,121	241,399
	<b>1,105,623</b>	<b>152,274</b>	<b>237,542</b>	<b>82,287</b>	<b>288,440</b>	<b>500,772</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	104,500	.....	.....	.....	.....	1,400
Accounts payable.....	12,804	773	490	398	.....	2,076
Other.....	27,814	377	1,623	281	912	3,308
Total liabilities.....	145,118	1,150	2,113	679	912	6,784
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	449,738	54,161	86,036	29,536	156,121	241,399
Other.....	.....	.....	100	.....	39	.....
Total reserves.....	449,738	54,161	86,136	29,536	156,160	241,399
<b>CAPITAL</b>						
Debentures redeemed.....	139,500	9,804	19,882	11,000	18,950	22,771
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	371,267	87,159	129,411	40,546	120,558	229,818
Frequency standardization expense charged this year.....	.....	.....	.....	526	8,140	.....
Total capital.....	510,767	96,963	149,293	52,072	131,368	252,589
	<b>105,623</b>	<b>152,274</b>	<b>237,542</b>	<b>82,287</b>	<b>288,440</b>	<b>500,772</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	407,365	48,450	58,462	16,425	74,122	158,713
Other.....	2,696	1,709	1,203	116	516	1,740
Total revenue.....	<b>410,061</b>	<b>50,159</b>	<b>59,665</b>	<b>16,541</b>	<b>74,638</b>	<b>160,453</b>
<b>EXPENSE</b>						
Power purchased.....	248,684	36,951	43,961	10,219	43,141	117,490
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	36,346	4,542	5,118	1,206	9,661	14,768
Administration.....	34,375	3,494	6,333	1,436	8,190	15,987
Fixed charges—interest and principal	21,054	.....	.....	4	55	1,418
—depreciation.....	16,534	1,730	3,357	1,418	5,060	8,551
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>356,993</b>	<b>46,717</b>	<b>58,769</b>	<b>14,283</b>	<b>66,107</b>	<b>158,214</b>
Net income or net expense.....	<b>53,068</b>	<b>3,442</b>	<b>896</b>	<b>2,258</b>	<b>8,531</b>	<b>2,239</b>
Number of customers.....	2,780	473	829	328	1,144	1,718

Statements for the Year Ended December 31, 1959

Preston	Priceville	Princeton	Queenston	Renfrew	Richmond	Richmond Hill	Ridgetown	Ripley
10,953	158	439	448	8,406	1,030	15,032	2,546	450
\$ 1,100,440 204,815	\$ 15,789 4,988	\$ 31,062 5,899	\$ 38,672 6,262	\$ 1,255,912 255,482	\$ 71,642 4,284	\$ 939,685 76,110	\$ 188,557 27,580	\$ 36,845 6,265
895,625	10,801	25,163	32,410	1,000,430	67,358	863,575	160,977	30,580
52,658	1,261	3,247	6,380	77,915	.....	65,498	10,273	10,063
.....	5,500	3,000	8,000	45,000	.....	.....	.....	10,000
10,571	72	674	605	30,570	1,268	27,080	2,623	70
63,229	6,833	6,921	14,985	153,485	1,268	92,578	12,896	20,133
38,348	.....	.....	.....	15,593	14	5,264	171	.....
2,048	540	55	.....	183	.....	12,698	3,386	.....
40,396	540	55	.....	15,776	14	17,962	3,557	.....
930,555	4,037	35,506	28,133	106,853	20,636	189,814	154,973	32,267
1,929,805	22,211	67,645	75,528	1,276,544	89,276	1,163,929	332,403	82,980
225,280	3,600	2,000	.....	191,644	6,500	559,010	50,827	.....
1,232	159	429	1,688	11,442	4,021	3,318	2,719	.....
14,000	87	615	140	9,053	888	32,987	5,946	458
240,512	3,846	3,044	1,828	212,139	11,409	595,315	59,492	458
930,555	4,037	35,506	28,133	106,853	20,636	189,814	154,973	32,267
64	.....	.....	55	128	.....	1,700	206	.....
930,619	4,037	35,506	28,188	106,981	20,636	191,514	155,179	32,267
252,520	8,566	4,050	9,500	579,592	7,387	61,922	30,628	12,744
.....	.....	.....	.....	.....	.....	.....	.....	.....
502,984	5,762	24,813	35,854	377,832	49,844	315,016	85,967	37,511
3,170	.....	232	158	.....	.....	162	1,137	.....
758,674	14,328	29,095	45,512	957,424	57,231	377,100	117,732	50,255
1,929,805	22,211	67,645	75,528	1,276,544	89,276	1,163,929	332,403	82,980
520,569	3,616	13,208	18,107	301,453	25,709	497,914	89,742	16,674
2,905	261	173	340	4,164	4	3,033	1,314	521
523,474	3,877	13,381	18,447	305,617	25,713	500,947	91,056	17,195
311,978	1,828	9,612	11,436	111,080	15,177	308,801	53,830	11,437
.....	.....	.....	.....	42,385	.....	.....	.....	.....
51,845	552	398	921	24,317	1,888	23,116	8,821	923
26,994	456	1,057	1,191	31,896	982	32,317	9,990	1,386
28,037	446	385	.....	19,790	638	40,966	5,205	.....
27,596	491	814	922	30,241	1,418	19,267	4,631	953
.....	.....	.....	.....	.....	.....	.....	.....	.....
446,450	3,773	12,266	14,470	259,709	20,103	424,467	82,477	14,699
77,024	104	1,115	3,977	45,908	5,610	76,480	8,579	2,496
3,115	65	169	166	2,665	309	4,628	1,028	218



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Riverside	Rockland	Rockwood	Rodney	Rosseau	Russell
Population.....	16,716	2,880	868	1,025	212	562
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	759,820	102,849	46,152	57,728	22,029	37,537
Accumulated depreciation.....	151,264	9,269	9,802	20,682	6,228	7,342
Net fixed assets.....	608,556	93,580	36,350	37,046	15,801	30,195
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	5,352	6,870	6,752	5,477	4,060	7,991
Investment in government securities.....			1,500	5,200	1,500	12,000
Accounts receivable.....	10,582	8,166	425	1,071	178	2,021
Total current assets.....	15,934	15,036	8,677	11,748	5,738	22,012
<b>OTHER ASSETS</b>						
Inventory of stores.....	26,947	15	119	20		
Sinking fund on local debentures.....						
Miscellaneous.....	1,536	1,251	1,596	241		
Total other assets.....	28,483	1,266	1,715	261		
Equity in Ontario Hydro Systems.....	389,642	13,086	43,047	52,305	13,956	22,744
	<b>1,042,615</b>	<b>122,968</b>	<b>89,789</b>	<b>101,360</b>	<b>35,495</b>	<b>74,951</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	30,050	20,000	6,859			
Accounts payable.....	22,875	3,216	239	2,449		221
Other.....	11,090	2,813	688	430	63	315
Total liabilities.....	64,015	26,029	7,786	2,879	63	536
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	389,642	13,086	43,047	52,305	13,956	22,744
Other.....	536	547		73	27	
Total reserves.....	390,178	13,633	43,047	52,378	13,983	22,744
<b>CAPITAL</b>						
Debentures redeemed.....	132,450	5,000	5,641	8,500	11,933	8,808
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	450,562	78,306	32,966	36,914	9,516	42,863
Frequency standardization expense charged this year.....	5,410		349	689		
Total capital.....	588,422	83,306	38,956	46,103	21,449	51,671
	<b>1,042,615</b>	<b>122,968</b>	<b>89,789</b>	<b>101,360</b>	<b>35,495</b>	<b>74,951</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	359,307	47,476	23,389	27,798	6,591	13,150
Other.....	3,673	164	284	343	176	584
Total revenue.....	<b>362,980</b>	<b>47,640</b>	<b>23,673</b>	<b>28,141</b>	<b>6,767</b>	<b>13,734</b>
<b>EXPENSE</b>						
Power purchased.....	207,710	28,199	17,184	18,691	3,589	8,548
Local generation.....						
Operation and maintenance.....	38,078	5,516	1,261	1,492	571	1,379
Administration.....	45,969	3,524	2,742	3,247	685	1,514
Fixed charges—interest and principal	10,121	1,922	590			
—depreciation.....	18,917	2,284	1,256	1,885	665	996
—other.....						
Total expense.....	<b>320,795</b>	<b>41,445</b>	<b>23,033</b>	<b>25,315</b>	<b>5,510</b>	<b>12,437</b>
Net income or net expense.....	<b>42,185</b>	<b>6,195</b>	<b>640</b>	<b>2,826</b>	<b>1,257</b>	<b>1,297</b>
Number of customers.....	5,212	694	299	442	117	203

## Statements for the Year Ended December 31, 1959

St. Catharines 41,211	St. Clair Beach 1,371	St. George 711	St. Jacobs 722	St. Mary's 4,349	St. Thomas 19,617	Sandwich East Twp. 21,347	Sandwich West Twp. 26,297	Sarnia 47,119
\$ 3,977,065 559,372	\$ 88,525 18,244	\$ 48,595 2,587	\$ 47,072 9,355	\$ 452,346 112,812	\$ 1,618,053 431,041	\$ 1,295,310 243,143	\$ 1,886,991 309,407	\$ 4,357,944 892,730
3,417,693	70,281	46,008	37,717	339,534	1,187,012	1,052,167	1,577,584	3,465,214
208,449	10,561	451	3,259	29,898	300	49,677	15,569	600
100,000	.....	6,000	4,734	42,500	35,000	53,142	157,741	150,000
170,630	955	1,913	1,448	3,666	66,838	71,184	59,740	149,996
479,079	11,516	8,364	9,441	76,064	102,138	174,003	233,050	300,596
93,525	28	80	10	19,270	37,984	34,594	36,142	231,703
2,525	647	.....	.....	4,098	2,071	45,932	60,892	49,366
96,050	675	80	10	23,368	40,055	80,526	97,034	281,069
3,375,540	32,092	50,004	64,124	457,432	1,710,862	161,367	292,721	2,850,084
<b>7,368,362</b>	<b>114,564</b>	<b>104,456</b>	<b>111,292</b>	<b>896,398</b>	<b>3,040,067</b>	<b>1,468,063</b>	<b>2,200,389</b>	<b>6,896,963</b>
.....	6,600	.....	.....	46,935	.....	954,000	1,162,600	671,700
167,847	2,746	30	230	5	38,404	26,623	1,479	233,079
23,863	1,095	656	100	3,604	46,529	35,691	97,470	100,594
191,710	10,441	686	330	50,544	84,933	1,016,314	1,261,549	1,005,373
3,375,540	32,092	50,004	64,124	457,432	1,710,862	161,367	292,721	2,850,084
7,265	.....	.....	.....	44	155	640	100	13,753
3,382,805	32,092	50,004	64,124	457,476	1,711,017	162,007	292,821	2,863,837
302,023	11,741	6,000	6,000	147,326	138,944	91,513	132,900	566,300
.....	.....	.....	.....	.....	.....	.....	.....	.....
3,491,824	59,941	47,766	40,533	240,000	1,138,983	198,229	512,104	2,460,753
.....	349	.....	305	1,052	33,810	.....	1,015	700
3,793,847	72,031	53,766	46,838	388,378	1,244,117	289,742	646,019	3,027,753
<b>7,368,362</b>	<b>114,564</b>	<b>104,456</b>	<b>111,292</b>	<b>896,398</b>	<b>3,040,067</b>	<b>1,468,063</b>	<b>2,200,389</b>	<b>6,896,963</b>
2,348,607	37,680	21,975	25,949	498,128	820,663	569,743	801,717	5,205,079
15,706	138	362	323	5,148	13,162	7,621	6,662	54,765
<b>2,364,313</b>	<b>37,818</b>	<b>22,337</b>	<b>26,272</b>	<b>503,276</b>	<b>833,825</b>	<b>577,364</b>	<b>808,379</b>	<b>5,259,844</b>
1,520,265	20,926	17,485	19,066	426,799	493,625	216,463	380,780	4,209,475
.....	.....	.....	.....	.....	.....	.....	.....	.....
183,151	2,612	1,314	1,336	20,115	128,875	108,907	74,787	307,774
159,399	2,524	1,867	1,471	20,800	71,979	78,112	85,941	198,363
1,996	1,560	.....	33	5,619	97	86,096	102,752	66,607
92,686	3,957	979	1,281	12,223	46,650	32,470	46,281	109,573
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>1,957,497</b>	<b>31,579</b>	<b>21,645</b>	<b>23,187</b>	<b>485,556</b>	<b>741,226</b>	<b>522,048</b>	<b>690,541</b>	<b>4,891,792</b>
<b>406,816</b>	<b>6,239</b>	<b>692</b>	<b>3,085</b>	<b>17,720</b>	<b>92,599</b>	<b>55,316</b>	<b>117,838</b>	<b>368,052</b>
13,980	422	286	227	1,622	7,003	6,342	7,627	14,905

Municipal Electrical Utilities Financial

Southern Ontario System—Continued

Municipality.....	Scarborough Twp.	Seaforth	Shelburne	Simcoe	Smith's Falls	Smithville
Population.....	184,654	2,228	1,257	8,418	9,032	835
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	16,875,683	223,457	110,975	651,936	735,403	60,621
Accumulated depreciation.....	1,448,482	22,548	31,251	139,088	182,832	11,646
Net fixed assets.....	15,427,201	200,909	79,724	512,848	552,571	48,975
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	157,969	13,824	14,418	16,721	3,209	5,613
Investment in government securities	627,500	9,000	.....	.....	20,000	3,000
Accounts receivable.....	330,588	4,603	1,020	5,616	3,714	742
Total current assets.....	1,116,057	27,427	15,438	22,337	26,923	9,355
<b>OTHER ASSETS</b>						
Inventory of stores.....	125,822	541	380	19,225	19,556	294
Sinking fund on local debentures...	409,292	.....	.....	.....	.....	.....
Miscellaneous.....	182,984	571	.....	24,816	299	.....
Total other assets.....	718,098	1,112	380	44,041	19,855	294
Equity in Ontario Hydro Systems...	2,843,191	204,903	81,940	502,551	498,614	29,645
	<b>20,104,547</b>	<b>434,351</b>	<b>177,482</b>	<b>1,081,777</b>	<b>1,097,963</b>	<b>88,269</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	8,210,150	27,500	.....	.....	10,000	.....
Accounts payable.....	862,562	1,136	2,230	16	20,376	562
Other.....	1,013,148	2,986	146	10,198	886	342
Total liabilities.....	10,085,860	31,622	2,376	10,214	31,262	904
<b>RESERVES</b>						
Equity in Ontario Hydro Systems...	2,843,191	204,903	81,940	502,551	498,614	29,645
Other.....	11,088	5	48	.....	199	.....
Total reserves.....	2,854,279	204,908	81,988	502,551	498,813	29,645
<b>CAPITAL</b>						
Debentures redeemed.....	1,576,449	47,500	16,991	75,435	137,787	15,000
Local sinking fund.....	409,292	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	5,177,151	150,117	76,127	489,295	430,101	42,188
Frequency standardization expense charged this year.....	1,516	204	.....	4,282	.....	532
Total capital.....	7,164,408	197,821	93,118	569,012	567,888	57,720
	<b>20,104,547</b>	<b>434,351</b>	<b>177,482</b>	<b>1,081,777</b>	<b>1,097,963</b>	<b>88,269</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	6,808,265	82,039	51,962	401,918	321,688	37,543
Other.....	117,534	894	93	2,132	2,684	238
Total revenue.....	<b>6,925,799</b>	<b>82,933</b>	<b>52,055</b>	<b>404,050</b>	<b>324,372</b>	<b>37,781</b>
<b>EXPENSE</b>						
Power purchased.....	4,180,367	49,614	31,950	257,728	208,140	21,339
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	296,707	14,346	3,299	35,148	21,541	3,583
Administration.....	537,219	7,345	3,342	20,922	36,927	5,295
Fixed charges—interest and principal	745,223	2,972	.....	2	3,030	.....
—depreciation.....	350,479	4,852	3,352	17,927	20,350	1,561
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>6,109,995</b>	<b>79,129</b>	<b>41,943</b>	<b>331,727</b>	<b>289,988</b>	<b>31,778</b>
Net income or net expense.....	<b>815,804</b>	<b>3,804</b>	<b>10,112</b>	<b>72,323</b>	<b>34,384</b>	<b>6,003</b>
Number of customers.....	60,872	867	564	3,129	3,365	374

Statements for the Year Ended December 31, 1959

Southamp- ton 1,742	Springfield 524	Stamford Twp. 29,077	Stayner 1,584	Stirling 1,312	Stoney Creek 5,974	Stouffville 2,874	Stratford 20,189	Strathroy 4,833
\$ 162,457 15,323	\$ 38,516 11,829	\$ 2,252,411 300,752	\$ 106,493 18,035	\$ 114,584 34,376	\$ 336,883 37,908	\$ 175,662 23,241	\$ 1,999,225 540,672	\$ 391,163 113,456
147,134	26,687	1,951,659	88,458	80,208	298,975	152,421	1,458,553	277,707
10,729	5,697	239,061	3,734	27,331	36,999	10,004	2,000	2,635
5,000	500	8,000	1,000	.....	.....	24,704	180,000	.....
562	808	40,503	1,748	895	5,885	1,258	21,451	4,035
16,291	7,005	287,564	6,482	28,226	42,884	35,966	203,451	6,670
1,889	.....	55,153	126	2,111	.....	418	61,411	577
120	66	30,269	1,933	749	10,540	2,250	2,469	723
2,009	66	85,422	2,059	2,860	10,540	2,668	63,880	1,300
86,089	29,808	631,612	75,262	52,329	73,227	98,241	1,951,950	337,181
<b>251,523</b>	<b>63,566</b>	<b>2,956,257</b>	<b>172,261</b>	<b>163,623</b>	<b>425,626</b>	<b>289,296</b>	<b>3,677,834</b>	<b>622,858</b>
7,822	.....	1,059,183	.....	9,392	51,011	67,148	.....	7,500
432	.....	47,778	1,161	.....	1,712	386	176,299	1,774
1,497	125	21,515	426	728	5,532	8,107	14,721	4,769
9,751	125	1,128,476	1,587	10,120	58,255	75,641	191,020	14,043
86,089	29,808	631,612	75,262	52,329	73,227	98,241	1,951,950	337,181
.....	314	37,531	100	.....	.....	51	721	60
86,089	30,122	669,143	75,362	52,329	73,227	98,292	1,952,671	337,241
34,701	9,500	511,095	9,557	13,608	28,989	17,374	455,800	56,389
.....	.....	.....	.....	.....	.....	.....	.....	.....
120,982	25,016	644,705	85,755	87,566	262,869	97,581	1,070,123	214,291
.....	1,197	2,838	.....	.....	2,286	408	8,220	894
155,683	33,319	1,158,638	95,312	101,174	294,144	115,363	1,534,143	271,574
<b>251,523</b>	<b>63,566</b>	<b>2,956,257</b>	<b>172,261</b>	<b>163,623</b>	<b>425,626</b>	<b>289,296</b>	<b>3,677,834</b>	<b>622,858</b>
75,830	13,787	1,007,702	56,327	41,508	182,854	98,539	861,627	185,169
1,217	136	3,827	162	935	895	322	21,014	338
<b>77,047</b>	<b>13,923</b>	<b>1,011,529</b>	<b>56,489</b>	<b>42,443</b>	<b>183,749</b>	<b>98,861</b>	<b>882,641</b>	<b>185,507</b>
43,511	8,046	565,129	33,863	25,377	124,009	69,825	518,890	120,540
.....	.....	.....	.....	.....	.....	.....	.....	.....
11,670	2,684	115,905	3,808	6,436	7,015	6,150	74,331	21,378
6,044	1,101	68,281	3,558	5,505	17,741	9,115	93,348	19,265
1,548	.....	89,995	.....	999	6,245	3,350	4,965	1,255
3,643	1,168	51,970	2,688	2,069	7,664	3,859	56,226	11,374
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>66,416</b>	<b>12,999</b>	<b>891,280</b>	<b>43,917</b>	<b>40,386</b>	<b>162,674</b>	<b>92,299</b>	<b>747,760</b>	<b>173,812</b>
<b>10,631</b>	<b>924</b>	<b>120,249</b>	<b>12,572</b>	<b>2,057</b>	<b>21,075</b>	<b>6,562</b>	<b>134,881</b>	<b>11,695</b>
1,108	179	8,798	622	518	1,861	1,062	6,937	1,756



## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Streetsville	Sunderland	Sundridge	Sutton	Swansea	Tara
Population.....	4,823	573	765	1,405	9,221	477
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	340,623	42,688	65,227	128,963	598,222	40,733
Accumulated depreciation.....	39,856	8,771	7,424	34,224	120,283	9,918
Net fixed assets.....	300,767	33,917	57,803	94,739	477,939	30,815
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	23,202	8,477	5,866	9,782	102,367	736
Investment in government securities.....	.....	2,000	9,897	7,000	96,433	8,000
Accounts receivable.....	6,147	287	423	5,840	4,919	2,586
Total current assets.....	29,349	10,764	16,186	22,622	203,719	11,322
<b>OTHER ASSETS</b>						
Inventory of stores.....	479	187	412	.....	16,877	40
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	25	.....	.....	.....	2,224	.....
Total other assets.....	504	187	412	.....	19,101	40
Equity in Ontario Hydro Systems.....	75,012	38,506	7,145	84,080	438,545	34,255
	<b>405,632</b>	<b>83,374</b>	<b>81,546</b>	<b>201,441</b>	<b>1,139,304</b>	<b>76,432</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	116,173	.....	26,382	.....	81,641	.....
Accounts payable.....	13,696	42	217	5,001	1,514	71
Other.....	34,099	85	31	1,085	15,912	.....
Total liabilities.....	163,968	127	26,630	6,086	99,067	71
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	75,012	38,506	7,145	84,080	438,545	34,255
Other.....	388	.....	.....	350	200	.....
Total reserves.....	75,400	38,506	7,145	84,430	438,745	34,255
<b>CAPITAL</b>						
Debentures redeemed.....	36,768	4,628	8,618	26,000	167,824	14,264
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	128,553	40,113	39,153	84,613	430,597	27,842
Frequency standardization expense charged this year.....	943	.....	.....	312	3,071	.....
Total capital.....	166,264	44,741	47,771	110,925	601,492	42,106
	<b>405,632</b>	<b>83,374</b>	<b>81,546</b>	<b>201,441</b>	<b>1,139,304</b>	<b>76,432</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	163,396	22,986	23,672	60,842	307,405	18,482
Other.....	1,481	172	458	275	13,376	323
Total revenue.....	<b>164,877</b>	<b>23,158</b>	<b>24,130</b>	<b>61,117</b>	<b>320,781</b>	<b>18,805</b>
<b>EXPENSE</b>						
Power purchased.....	108,346	15,211	12,761	41,747	208,721	14,372
Local generation.....	6,210	.....	.....	.....	.....	.....
Operation and maintenance.....	6,501	904	1,883	2,556	39,873	1,224
Administration.....	12,400	1,422	1,891	6,462	30,987	895
Fixed charges—interest and principal	10,847	.....	2,808	19	14,103	.....
—depreciation.....	7,631	1,136	1,313	3,775	15,307	1,167
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>151,935</b>	<b>18,673</b>	<b>20,656</b>	<b>54,559</b>	<b>308,991</b>	<b>17,658</b>
Net income or net expense.....	<b>12,942</b>	<b>4,485</b>	<b>3,474</b>	<b>6,558</b>	<b>11,790</b>	<b>1,147</b>
Number of customers.....	1,425	258	297	884	3,507	234

Statements for the Year Ended December 31, 1959

Tavistock	Tecumseh	Teeswater	Thamesford	Thamesville	Thedford	Thornbury	Thorndale	Thornton
1,204	4,359	877	878	1,015	733	1,129	410	295
\$ 103,612 30,098	\$ 214,850 61,351	\$ 79,989 12,872	\$ 66,909 12,285	\$ 96,898 20,989	\$ 50,847 7,602	\$ 136,325 13,060	\$ 30,444 9,399	\$ 20,240 7,922
73,514	153,499	67,117	54,624	75,909	43,245	123,265	21,045	12,318
18,680	7,722	.....	4,447	8,641	409	416	6,048	1,353
.....	.....	15,000	.....	6,840	14,920	4,000	3,000	.....
981	7,951	129	895	1,384	693	4,165	375	336
19,661	15,673	15,129	5,342	16,865	16,022	8,581	9,423	1,689
313	11,715	.....	.....	14	.....	1,645	.....	.....
378	.....	1,196	69	173	869	286	535	425
691	11,715	1,196	69	187	869	1,931	535	425
155,749	117,780	51,718	64,269	69,925	40,339	19,426	30,505	12,403
249,615	298,667	135,160	124,304	162,886	100,475	153,203	61,508	26,835
22,628	.....	.....	2,200	.....	.....	24,479	.....	.....
1,038	315	1,179	746	28	.....	536	1,221	1,538
1,187	1,905	79	668	1,095	384	320	6	63
24,853	2,220	1,258	3,614	1,123	384	25,335	1,227	1,601
155,749	117,780	51,718	64,269	69,925	40,339	19,426	30,505	12,403
.....	.....	.....	7	126	9	.....	28	.....
155,749	117,780	51,718	64,276	70,051	40,348	19,426	30,533	12,403
13,016	26,000	21,296	6,158	11,188	16,500	61,521	3,086	7,200
.....	.....	.....	.....	.....	.....	.....	.....	.....
55,255	150,762	60,888	49,983	82,164	43,157	46,921	26,561	5,631
742	1,905	.....	273	1,640	86	.....	101	.....
69,013	178,667	82,184	56,414	91,712	59,743	108,442	29,748	12,831
249,615	298,667	135,160	124,304	162,886	100,475	153,203	61,508	26,835
49,961	85,094	32,799	37,030	40,509	20,624	49,242	13,358	6,666
2,018	1,098	871	143	363	654	267	173	2
51,979	86,192	33,670	37,173	40,872	21,278	49,509	13,531	6,668
30,586	48,200	25,096	26,277	28,335	16,887	24,101	8,874	3,861
.....	.....	.....	.....	.....	.....	8,669	.....	.....
5,191	15,429	2,424	1,602	3,862	1,469	4,146	1,254	533
3,041	14,198	2,329	2,270	5,299	2,412	3,898	1,271	432
2,260	4	.....	182	.....	.....	2,797	.....	.....
3,020	6,423	1,953	1,716	2,681	1,243	2,960	927	465
44,098	84,254	31,802	32,047	40,177	22,011	46,571	12,326	5,291
7,881	1,938	1,868	5,126	695	733	2,938	1,205	1,377
502	1,319	359	348	448	299	526	135	103

## Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Thorold	Tilbury	Tillsonburg	Toronto	Toronto Twp.	Tottenham
Population.....	8,483	3,011	6,471	665,382	57,197	754
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	572,786	226,723	705,341	93,573,475	5,567,017	37,289
Accumulated depreciation.....	81,991	61,496	65,833	25,124,575	540,670	8,392
Net fixed assets.....	490,795	165,227	639,508	68,448,900	5,026,347	28,897
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	38,565	5,500	200	68,109	39,840	10,358
Investment in government securities.....		10,000		3,598,339	8,000	5,500
Accounts receivable.....	5,744	3,034	5,234	4,704,318	286,325	1,138
Total current assets.....	44,309	18,534	5,434	8,370,766	334,165	16,996
<b>OTHER ASSETS</b>						
Inventory of stores.....	16,701	169	20,525	2,561,515	198,290	
Sinking fund on local debentures.....				320,518		
Miscellaneous.....	3,407	475	11,954	561,898	192,498	
Total other assets.....	20,108	644	32,479	3,443,931	390,788	
Equity in Ontario Hydro Systems.....	575,449	206,903	356,617	73,548,040	1,284,841	40,742
	<b>1,130,661</b>	<b>391,308</b>	<b>1,034,038</b>	<b>153,811,637</b>	<b>7,036,141</b>	<b>86,635</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	97,840	42,500	104,307	14,069,024	1,129,816	3,114
Accounts payable.....	3,016		9,967	2,220,080	166,446	43
Other.....	16,074	4,470	16,233	651,884	273,062	808
Total liabilities.....	116,930	46,970	130,507	16,940,988	1,569,324	3,965
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	575,449	206,903	356,617	73,548,040	1,284,841	40,742
Other.....	299	420	137	693,779	20,923	
Total reserves.....	575,748	207,323	356,754	74,241,819	1,305,764	40,742
<b>CAPITAL</b>						
Debentures redeemed.....	32,160	21,500	111,693	30,858,960	475,094	18,321
Local sinking fund.....				320,518		
Accumulated net income invested in plant or held as working funds.	405,823	114,306	431,048	31,449,352	3,675,446	23,607
Frequency standardization expense charged this year.....		1,209	4,036		10,513	
Total capital.....	437,983	137,015	546,777	62,628,830	4,161,053	41,928
	<b>1,130,661</b>	<b>391,308</b>	<b>1,034,038</b>	<b>153,811,637</b>	<b>7,036,141</b>	<b>86,635</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	527,248	85,298	255,712	36,287,665	2,722,930	22,416
Other.....	2,156	1,420	642	431,092	26,575	270
Total revenue.....	<b>529,404</b>	<b>86,718</b>	<b>256,354</b>	<b>36,718,757</b>	<b>2,749,505</b>	<b>22,686</b>
<b>EXPENSE</b>						
Power purchased.....	402,740	47,353	154,478	20,989,396	1,821,022	14,332
Local generation.....						
Operation and maintenance.....	37,251	11,648	38,593	4,981,014	242,166	1,704
Administration.....	27,271	11,332	24,736	4,189,550	183,791	1,179
Fixed charges—interest and principal	10,901	4,441	15,727	1,240,540	115,985	838
—depreciation.....	13,311	6,461	15,645	2,967,875	118,627	1,030
—other.....						
Total expense.....	<b>491,474</b>	<b>81,235</b>	<b>249,179</b>	<b>34,368,375</b>	<b>2,481,591</b>	<b>19,083</b>
Net income or net expense.....	<b>37,930</b>	<b>5,483</b>	<b>7,175</b>	<b>2,350,382</b>	<b>267,914</b>	<b>3,603</b>
Number of customers.....	2,529	1,009	2,424	205,205	15,525	275

## Statements for the Year Ended December 31, 1959

Trafalgar Twp. 28,624	Trenton 12,095	Tweed 1,688	Uxbridge 2,311	Vankleek Hill 1,675	Victoria Harbour 1,030	Walkerton 3,811	Wallace- burg 8,050	Wardsville 336
\$ 1,886,599 78,276	\$ 970,486 249,699	\$ 141,935 17,167	\$ 139,072 23,623	\$ 124,032 21,788	\$ 54,256 10,147	\$ 254,001 22,759	\$ 890,635 217,814	\$ 24,364 6,189
1,808,323	720,787	124,768	115,449	102,244	44,109	231,242	672,821	18,175
37,811	8,820	820	15,452	9,795	6,706	8,078	120,917	2,149
57,362	65,300	24,500	22,325	109	799	23,000	49,769	1,500
	18,108	332	1,006			8,480	27,422	377
95,173	92,228	25,652	38,783	9,904	7,505	39,558	198,108	4,026
58,298	23,288	614	2,020		819	14,504	60,832	
18,065	100			1,686	75	229		
76,363	23,388	614	2,020	1,686	894	14,733	60,832	
228,693	657,855	65,079	98,016	9,194	26,506	152,181	878,251	16,241
<b>2,208,552</b>	<b>1,494,258</b>	<b>216,113</b>	<b>254,268</b>	<b>123,028</b>	<b>79,014</b>	<b>437,714</b>	<b>1,810,012</b>	<b>38,442</b>
832,655				36,200	10,300			
91,272	4,655		2,166	4,613	23	609	1,813	2,240
195,505	17,627	507	1,927	2,025	115	2,570	7,505	120
1,119,432	22,282	507	4,093	42,838	10,438	3,179	9,318	2,360
228,693	657,855	65,079	98,016	9,194	26,506	152,181	878,251	16,241
4,214	300	338	206			347	1,301	20
232,907	658,155	65,417	98,222	9,194	26,506	152,528	879,552	16,261
167,724	164,587	19,000	15,364	9,800	8,579	56,749	71,537	7,562
688,472	649,234	131,189	136,589	61,196	33,491	225,258	849,605	13,644
17								1,385
856,213	813,821	150,189	151,953	70,996	42,070	282,007	921,142	19,821
<b>2,208,552</b>	<b>1,494,258</b>	<b>216,113</b>	<b>254,268</b>	<b>123,028</b>	<b>79,014</b>	<b>437,714</b>	<b>1,810,012</b>	<b>38,442</b>
1,141,168	605,649	41,967	81,956	43,357	23,343	120,445	445,617	10,560
18,638	4,374	1,472	739	461	6	2,764	6,052	237
<b>1,159,806</b>	<b>610,023</b>	<b>43,439</b>	<b>82,695</b>	<b>43,818</b>	<b>23,349</b>	<b>123,209</b>	<b>451,669</b>	<b>10,797</b>
720,480	478,085	32,781	55,106	18,838	12,028	88,376	307,400	7,153
99,525	28,994	2,182	7,246	2,992	2,725	12,203	37,690	602
91,405	39,628	4,684	6,513	4,150	1,837	16,697	40,661	568
82,661	67			3,510	1,195			81
35,304	26,952	3,325	3,430	3,116	1,422	5,616	25,152	735
<b>1,029,375</b>	<b>573,726</b>	<b>42,972</b>	<b>72,295</b>	<b>32,606</b>	<b>19,207</b>	<b>122,892</b>	<b>410,903</b>	<b>9,139</b>
<b>130,431</b>	<b>36,297</b>	<b>467</b>	<b>10,400</b>	<b>11,212</b>	<b>4,142</b>	<b>317</b>	<b>40,766</b>	<b>1,658</b>
6,938	3,978	613	863	533	487	1,272	2,638	143



# Municipal Electrical Utilities Financial

## Southern Ontario System—Continued

Municipality.....	Warkworth	Wasaga Beach	Waterdown	Waterford	Waterloo	Watford
Population.....	540	406	1,794	2,105	19,441	1,239
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	48,059	151,173	109,955	127,944	1,714,722	87,369
Accumulated depreciation.....	6,918	38,413	27,184	25,256	327,374	27,176
Net fixed assets.....	41,141	112,760	82,771	102,688	1,387,348	60,193
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	1,564	12,050	11,177	7,902	300	13,365
Investment in government securities	3,000	15,000	.....	.....	100	13,157
Accounts receivable.....	279	6,172	1,660	1,639	17,775	2,466
Total current assets.....	4,843	33,222	12,837	9,541	18,175	28,988
<b>OTHER ASSETS</b>						
Inventory of stores.....	.....	.....	52	77	46,930	693
Sinking fund on local debentures...	.....	.....	.....	.....	.....	.....
Miscellaneous.....	.....	2,970	368	622	7,353	75
Total other assets.....	.....	2,970	420	699	54,283	768
Equity in Ontario Hydro Systems...	19,394	13,689	83,199	114,736	1,131,396	102,320
	<b>65,378</b>	<b>162,641</b>	<b>179,227</b>	<b>227,664</b>	<b>2,591,202</b>	<b>192,269</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	7,600	72,000	10,000	33,800	452,500	.....
Accounts payable.....	1	.....	.....	845	30,372	298
Other.....	162	5	499	2,941	26,854	788
Total liabilities.....	7,763	72,005	10,499	37,586	509,726	1,086
<b>RESERVES</b>						
Equity in Ontario Hydro Systems...	19,394	13,689	83,199	114,736	1,131,396	102,320
Other.....	.....	4,126	.....	.....	65	.....
Total reserves.....	19,394	17,815	83,199	114,736	1,131,461	102,320
<b>CAPITAL</b>						
Debentures redeemed.....	11,400	38,000	13,000	8,946	303,500	9,056
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	26,821	34,821	71,889	65,607	642,454	79,642
Frequency standardization expense charged this year.....	.....	.....	640	789	4,061	165
Total capital.....	38,221	72,821	85,529	75,342	950,015	88,863
	<b>65,378</b>	<b>162,641</b>	<b>179,227</b>	<b>227,664</b>	<b>2,591,202</b>	<b>192,269</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	13,054	54,401	59,416	61,014	826,390	65,742
Other.....	91	2,000	290	129	2,078	909
Total revenue.....	<b>13,145</b>	<b>56,401</b>	<b>59,706</b>	<b>61,143</b>	<b>828,468</b>	<b>66,651</b>
<b>EXPENSE</b>						
Power purchased.....	8,156	25,056	35,769	37,317	511,017	46,675
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	719	7,261	8,059	6,100	73,119	4,382
Administration.....	789	7,969	4,888	3,881	49,154	7,298
Fixed charges—interest and principal	642	8,180	1,543	2,876	57,445	.....
—depreciation.....	1,090	4,092	3,141	3,283	43,257	2,717
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	<b>11,396</b>	<b>52,558</b>	<b>53,400</b>	<b>53,457</b>	<b>733,992</b>	<b>61,072</b>
Net income or net expense.....	<b>1,749</b>	<b>3,843</b>	<b>6,306</b>	<b>7,686</b>	<b>94,476</b>	<b>5,579</b>
Number of customers.....	232	1,010	584	752	6,000	522

## Statements for the Year Ended December 31, 1959

Waubashene V.A.	Welland 17,367	Wellesley 655	Wellington 1,012	West Lorne 1,116	Weston 9,254	Westport 680	Wheatley 1,320
\$ 44,375 7,517	\$ 1,690,850 379,891	\$ 49,069 6,081	\$ 69,866 25,218	\$ 105,125 30,013	\$ 1,079,719 192,110	\$ 37,850 3,421	\$ 137,285 22,840
36,858	1,310,959	42,988	44,648	75,112	887,609	34,429	114,445
1,746	77,103	142	291	9,190	49,692	2,111	10,086
.....	119,322	1,000	13,000	4,925	.....	8,000	.....
935	12,052	456	514	1,350	15,230	84	634
2,681	208,477	1,598	13,805	15,465	64,922	10,195	10,720
320	25,861	15	1,901	1,295	30,936	.....	239
.....	.....	.....	.....	.....	20,142	.....	.....
.....	58,897	72	1,175	1,107	5,777	15	.....
320	84,758	87	3,076	2,402	56,855	15	239
22,931	1,378,717	52,563	50,853	105,627	921,463	27,255	67,516
<b>62,790</b>	<b>2,982,911</b>	<b>97,236</b>	<b>112,382</b>	<b>198,606</b>	<b>1,930,849</b>	<b>71,894</b>	<b>192,920</b>
.....	503,500	4,100	.....	.....	185,513	.....	24,543
142	9,522	1,661	434	55	9,947	42	59
60	26,186	212	956	150	23,039	284	370
202	539,208	5,973	1,390	205	218,499	326	24,972
22,931	1,378,717	52,563	50,853	105,627	921,463	27,255	67,516
.....	286	.....	.....	7	811	.....	5
22,931	1,379,003	52,563	50,853	105,634	922,274	27,255	67,521
3,242	325,750	8,400	13,816	8,000	119,599	15,000	27,457
.....	.....	.....	.....	.....	20,142	.....	.....
36,415	733,469	29,960	46,323	84,302	646,836	29,313	72,475
.....	5,481	340	.....	465	3,499	.....	495
39,657	1,064,700	38,700	60,139	92,767	790,076	44,313	100,427
<b>62,790</b>	<b>2,982,911</b>	<b>97,236</b>	<b>112,382</b>	<b>198,606</b>	<b>1,930,849</b>	<b>71,894</b>	<b>192,920</b>
20,953 13	755,775 6,234	23,968 81	25,693 987	55,272 3,421	487,010 17,766	18,572 595	56,742 72
<b>20,966</b>	<b>762,009</b>	<b>24,049</b>	<b>26,680</b>	<b>58,693</b>	<b>504,776</b>	<b>19,167</b>	<b>56,814</b>
11,077	479,639	15,266	20,345	43,072	310,263	11,873	34,798
.....	.....	.....	.....	.....	.....	.....	.....
3,010	74,605	2,433	3,747	5,980	40,739	1,768	5,058
2,094	66,843	1,461	3,379	6,113	50,805	3,208	4,393
.....	43,328	492	.....	.....	19,893	.....	3,592
1,123	45,996	1,136	1,364	3,176	27,550	884	3,438
.....	.....	.....	.....	.....	.....	.....	.....
<b>17,304</b>	<b>710,411</b>	<b>20,788</b>	<b>28,835</b>	<b>58,341</b>	<b>449,250</b>	<b>17,733</b>	<b>51,279</b>
<b>3,662</b>	<b>51,598</b>	<b>3,261</b>	<b>2,155</b>	<b>352</b>	<b>55,526</b>	<b>1,434</b>	<b>5,535</b>
433	5,380	275	534	424	3,254	288	486

Municipal Electrical Utilities Financial

Southern Ontario System—Concluded

Municipality.....	Whitby	Warton	Williams- burg	Winchester	Windermere	Windsor
Population.....	11,943	1,968	356	1,348	127	117,712
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	989,410	119,214	21,516	102,216	28,507	11,614,939
Accumulated depreciation.....	159,720	16,696	6,184	20,919	6,849	3,628,916
Net fixed assets.....	829,690	102,518	15,332	81,297	21,658	7,986,023
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	13,616	2,826	1,090	7,865	7,830	68,529
Investment in government securities	10,000	24,000	15,000	.....	5,400	1,971,299
Accounts receivable.....	17,734	640	188	2,345	372	486,921
Total current assets.....	41,350	27,466	16,278	10,210	13,602	2,526,749
<b>OTHER ASSETS</b>						
Inventory of stores.....	21,098	607	43	.....	.....	268,365
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	180,468
Miscellaneous.....	200	.....	.....	.....	.....	1,390
Total other assets.....	21,298	607	43	.....	.....	450,223
Equity in Ontario Hydro Systems.....	343,906	86,146	23,946	89,563	12,287	11,789,089
	1,236,244	216,737	55,599	181,070	47,547	22,752,084
<b>LIABILITIES</b>						
Debentures outstanding.....	66,000	.....	.....	.....	.....	190,000
Accounts payable.....	106,553	4,822	.....	.....	8	250,974
Other.....	9,749	172	368	10	.....	173,143
Total liabilities.....	182,302	4,994	368	10	8	614,117
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	343,906	86,146	23,946	89,563	12,287	11,789,089
Other.....	.....	23	311	.....	90	244,876
Total reserves.....	343,906	86,169	24,257	89,563	12,377	12,033,965
<b>CAPITAL</b>						
Debentures redeemed.....	110,612	37,400	2,750	29,206	11,238	2,393,832
Local sinking fund.....	.....	.....	.....	.....	.....	180,468
Accumulated net income invested in plant or held as working funds.	599,424	88,174	28,224	62,291	23,924	7,529,702
Frequency standardization expense charged this year.....	.....	.....	.....	.....	.....	.....
Total capital.....	710,036	125,574	30,974	91,497	35,162	10,104,002
	1,236,244	216,737	55,599	181,070	47,547	22,752,084
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	530,990	62,906	9,062	59,321	7,695	4,353,098
Other.....	4,293	1,115	636	126	240	143,765
Total revenue.....	535,283	64,021	9,698	59,447	7,935	4,496,863
<b>EXPENSE</b>						
Power purchased.....	314,830	47,100	8,353	39,983	4,233	2,798,295
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	33,647	10,404	835	2,994	1,121	748,236
Administration.....	62,524	5,719	951	3,548	799	369,917
Fixed charges—interest and principal	18,361	.....	.....	.....	.....	8,969
—depreciation.....	23,712	2,796	645	2,634	814	356,192
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	453,074	66,019	10,784	49,159	6,967	4,281,609
Net income or net expense.....	82,209	1,998	1,086	10,288	968	215,254
Number of customers.....	3,681	776	145	550	120	37,050

## Statements for the Year Ended December 31, 1959

Wingham	Woodbridge	Woodstock	Woodville	Wyoming	York Twp.	Zurich	TOTAL SOUTHERN ONTARIO SYSTEM
2,715	2,243	19,458	409	843	123,555	624	
\$ 271,624 82,676	\$ 155,466 35,932	\$ 1,783,077 439,068	\$ 26,821 4,874	\$ 55,432 15,590	\$ 6,874,203 1,870,170	\$ 41,956 6,563	\$ 367,639,264 73,839,127
188,948	119,534	1,344,009	21,947	39,842	5,004,033	35,393	293,800,137
18,697	42,908	108,939	1,667	5,563	359,377	5,083	9,718,260
60,000	24,550	135,000	.....	9,120	554,000	.....	14,806,887
187	1,800	18,185	274	3,017	286,242	437	12,940,412
78,884	69,258	262,124	1,941	17,700	1,199,619	5,520	37,465,559
8,963	56	933	40	124	104,047	48	8,773,137
.....	.....	.....	.....	.....	.....	.....	1,726,182
1,936	.....	7,239	.....	.....	2,329	.....	2,318,770
10,899	56	8,172	40	124	106,376	48	12,818,089
176,714	165,635	1,612,412	32,202	34,733	3,798,715	47,992	226,415,099
<b>455,445</b>	<b>354,483</b>	<b>3,226,717</b>	<b>56,130</b>	<b>92,399</b>	<b>10,108,743</b>	<b>88,953</b>	<b>570,498,884</b>
.....	13,000	81,685	.....	.....	.....	.....	68,313,530
161	804	10,139	685	59	220,171	.....	9,950,484
3,207	3,219	27,643	50	108	450,613	80	6,153,927
3,368	17,023	119,467	735	167	670,784	80	84,417,941
176,714	165,635	1,612,412	32,202	34,733	3,798,715	47,992	226,415,099
91	386	629	477	64	52,208	.....	2,724,237
176,805	166,021	1,613,041	32,679	34,797	3,850,923	47,992	229,139,336
81,155	10,567	345,701	5,248	9,700	489,375	5,592	75,029,315
.....	.....	.....	.....	.....	.....	.....	1,726,182
194,117	160,786	1,159,396	17,468	47,665	5,058,009	35,028	179,895,294
.....	86	10,888	.....	70	39,652	261	290,816
275,272	171,439	1,494,209	22,716	57,435	5,587,036	40,881	256,941,607
<b>455,445</b>	<b>354,483</b>	<b>3,226,717</b>	<b>56,130</b>	<b>92,399</b>	<b>10,108,743</b>	<b>88,953</b>	<b>570,498,884</b>
109,582	107,233	968,396	13,812	22,054	3,204,911	24,433	167,481,623
7,426	1,302	10,592	17	563	32,851	2	2,276,252
<b>117,008</b>	<b>108,535</b>	<b>978,988</b>	<b>13,829</b>	<b>22,617</b>	<b>3,237,762</b>	<b>24,435</b>	<b>169,757,875</b>
75,671	72,954	610,579	8,497	14,636	2,127,717	15,422	106,155,095
3,210	.....	.....	.....	.....	.....	.....	511,963
8,740	2,593	91,883	1,193	1,742	267,086	1,336	16,180,467
13,046	6,814	51,844	974	1,622	383,365	1,908	14,184,268
.....	1,178	36,731	44	6	.....	.....	6,543,153
8,272	4,303	49,872	701	1,622	198,400	1,040	9,629,186
.....	.....	.....	.....	.....	.....	.....	14,316
<b>108,939</b>	<b>87,842</b>	<b>840,909</b>	<b>11,409</b>	<b>19,628</b>	<b>2,976,568</b>	<b>19,706</b>	<b>153,218,448</b>
<b>8,069</b>	<b>20,693</b>	<b>138,079</b>	<b>2,420</b>	<b>2,989</b>	<b>261,194</b>	<b>4,729</b>	<b>16,539,427</b>
1,032	753	6,692	186	324	39,725	297	1,240,872



Municipal Electrical Utilities Financial

Northern Ontario Properties

Municipality.....	Atikokan Twp.	Cache Bay	Capreol	Chapleau Twp.	Cochrane	Coniston
Population.....	6,906	845	2,563	3,773	4,261	2,568
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	464,267	53,273	163,905	126,158	376,875	95,794
Accumulated depreciation.....	61,016	8,921	27,352	4,868	60,239	8,225
Net fixed assets.....	403,251	44,352	136,553	121,290	316,636	86,569
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	77,063	1,836	6,657	5,479	26,510	10,088
Investment in government securities	50,000	11,673	.....	.....	.....	.....
Accounts receivable.....	7,863	85	1,445	4,334	3,658	9,816
Total current assets.....	134,926	13,594	8,102	9,813	30,168	19,904
<b>OTHER ASSETS</b>						
Inventory of stores.....	2,766	10	.....	.....	14,174	318
Sinking fund on local debentures.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	13,138	1,299	3,215	5,933	10,990	393
Total other assets.....	15,904	1,309	3,215	5,933	25,164	711
Equity in Ontario Hydro Systems....	36,516	.....	.....	.....	.....	.....
	590,597	59,255	147,870	137,036	371,968	107,184
<b>LIABILITIES</b>						
Debentures outstanding.....	362,000	10,000	35,400	99,000	100,250	45,500
Accounts payable.....	5,158	66	1,690	528	7,175	5,102
Other.....	38,982	105	1,400	2,430	11,631	7,381
Total liabilities.....	406,140	10,171	38,490	101,958	119,056	57,983
<b>RESERVES</b>						
Equity in Ontario Hydro Systems..	36,516	.....	.....	.....	.....	.....
Other.....	.....	49	381	122	205	186
Total reserves.....	36,516	49	381	122	205	186
<b>CAPITAL</b>						
Debentures redeemed.....	38,000	18,000	33,600	16,000	44,750	4,500
Local sinking fund.....	.....	.....	.....	.....	.....	.....
Accumulated net income invested in plant or held as working funds.	109,941	31,035	75,399	18,956	207,957	44,515
Frequency standardization expense charged this year.....	.....	.....	.....	.....	.....	.....
Total capital.....	147,941	49,035	108,999	34,956	252,707	49,015
	590,597	59,255	147,870	137,036	371,968	107,184
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	259,896	29,372	95,350	138,394	170,667	51,916
Other.....	4,058	918	405	20	1,691	187
Total revenue.....	263,954	30,290	95,755	138,414	172,358	52,103
<b>EXPENSE</b>						
Power purchased.....	159,998	22,747	60,860	94,045	91,479	31,322
Local generation.....	.....	.....	.....	.....	.....	.....
Operation and maintenance.....	11,784	963	6,544	9,686	22,940	3,400
Administration.....	32,527	1,959	9,754	9,435	22,453	4,551
Fixed charges—interest and principal	30,493	2,485	3,906	9,915	12,625	3,744
—depreciation.....	10,818	1,285	4,063	2,583	9,272	2,079
—other.....	.....	.....	.....	.....	.....	.....
Total expense.....	245,620	29,439	85,127	125,664	158,769	45,096
Net income or net expense.....	18,334	851	10,628	12,750	13,589	7,007
Number of customers.....	1,900	202	952	976	1,300	633

## Statements for the Year Ended December 31, 1959

Dryden 5,475	Fort William 42,900	Hearst 2,110	Kapuskas- ing 6,039	Larder Lake Twp. 1,973	Latchford 440	Massey 1,270	McGarry 2,969	Nipigon Twp. 2,633
\$ 451,219 84,088	\$ 3,715,623 684,022	\$ 211,931 24,262	\$ 354,885 13,907	\$ 61,710 21,260	\$ 31,607 5,377	\$ 80,460 4,520	\$ 70,387 14,637	\$ 153,654 24,218
367,131	3,031,601	187,669	340,978	40,450	26,230	75,940	55,750	129,436
42	55,146	21,910	.....	10,037	6,506	1,782	1,057	2,716
.....	85,800	40,000	.....	.....	.....	.....	.....	29,623
16,687	112,889	7,180	3,858	597	3,780	2,526	5,358	566
16,729	253,835	69,090	3,858	10,634	10,286	4,308	6,415	32,905
11,929	159,510	.....	16,347	.....	.....	.....	.....	774
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	4,311	5,488	1,989	2,292	.....	2,856	231	.....
11,929	163,821	5,488	18,336	2,292	.....	2,856	231	774
47,233	4,225,627	.....	.....	.....	.....	.....	.....	79,594
<b>443,022</b>	<b>7,674,884</b>	<b>262,247</b>	<b>363,172</b>	<b>53,376</b>	<b>36,516</b>	<b>83,104</b>	<b>62,396</b>	<b>242,709</b>
71,754	279,000	65,200	41,844	7,200	.....	38,000	6,000	.....
15,483	174,949	1,305	6,431	803	3,377	36	13	.....
17,223	75,995	6,163	9,432	6,103	355	1,587	6,438	2,601
104,460	529,944	72,668	57,707	14,106	3,732	39,623	12,451	2,601
47,233	4,225,627	.....	.....	.....	.....	.....	.....	79,594
454	3,341	5,087	518	135	39	.....	.....	.....
47,687	4,228,968	5,087	518	135	39	.....	.....	79,594
54,676	535,209	74,800	48,635	10,800	18,901	7,000	8,000	10,000
.....	.....	.....	.....	.....	.....	.....	.....	.....
236,199	2,380,763	109,692	256,312	28,335	13,844	36,481	41,945	150,514
.....	.....	.....	.....	.....	.....	.....	.....	.....
290,875	2,915,972	184,492	304,947	39,135	32,745	43,481	49,945	160,514
<b>443,022</b>	<b>7,674,884</b>	<b>262,247</b>	<b>363,172</b>	<b>53,376</b>	<b>36,516</b>	<b>83,104</b>	<b>62,396</b>	<b>242,709</b>
228,686	1,659,219	84,506	198,455	48,637	8,988	36,803	52,871	74,167
6,210	18,685	1,400	2,469	44	.....	.....	31	2,288
<b>234,896</b>	<b>1,677,904</b>	<b>85,906</b>	<b>200,924</b>	<b>48,681</b>	<b>8,988</b>	<b>36,803</b>	<b>52,902</b>	<b>76,455</b>
94,476	1,071,706	58,191	135,760	33,607	5,917	16,112	37,204	46,350
.....	.....	.....	.....	.....	.....	.....	.....	.....
35,111	151,127	7,318	14,180	3,541	503	5,656	1,641	9,129
25,402	117,240	8,360	24,398	5,145	1,009	5,423	6,891	8,751
9,476	31,375	8,637	6,474	1,618	1	3,876	1,280	6
10,520	91,120	3,773	6,931	1,976	758	1,590	1,891	3,671
.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>174,985</b>	<b>1,462,568</b>	<b>86,279</b>	<b>187,743</b>	<b>45,887</b>	<b>8,188</b>	<b>32,657</b>	<b>48,907</b>	<b>67,907</b>
<b>59,911</b>	<b>215,336</b>	<b>373</b>	<b>13,181</b>	<b>2,794</b>	<b>800</b>	<b>4,146</b>	<b>3,995</b>	<b>8,548</b>
1,642	13,464	601	1,977	567	153	375	481	725

## Municipal Electrical Utilities Financial

## Northern Ontario Properties—Concluded

Municipality.....	North Bay	Port Arthur	Rainy River	Red Rock	Schreiber Twp. 2,104	Sioux Lookout 2,613
Population.....	22,684	41,761	1,283	1,614		
<b>A. BALANCE SHEETS</b>						
<b>FIXED ASSETS</b>	\$	\$	\$	\$	\$	\$
Plant and facilities at cost.....	1,590,824	4,529,772	76,301	96,868	129,128	202,408
Accumulated depreciation.....	349,656	1,542,599	38,753	17,195	18,580	23,052
Net fixed assets.....	1,241,168	2,987,173	37,548	79,673	110,548	179,356
<b>CURRENT ASSETS</b>						
Cash on hand and in bank.....	1,100	163,237	14,046	15,774	18,375	444
Investment in government securities.....		376,000			15,000	5,000
Accounts receivable.....	25,745	169,423	8,179	618	720	4,029
Total current assets.....	26,845	708,660	22,225	16,392	34,095	9,473
<b>OTHER ASSETS</b>						
Inventory of stores.....	48,858	184,466	2,531			7,317
Sinking fund on local debentures.....						
Miscellaneous.....	6,274	6,362		3,571		
Total other assets.....	55,132	190,828	2,531	3,571		7,317
Equity in Ontario Hydro Systems.....		7,860,431		29,074	35,917	
	<b>1,323,145</b>	<b>11,747,092</b>	<b>62,304</b>	<b>128,710</b>	<b>180,560</b>	<b>196,146</b>
<b>LIABILITIES</b>						
Debentures outstanding.....	365,000		12,000	14,820		
Accounts payable.....	34,182	232,485	299	65		507
Other.....	75,011		300	110		6,425
Total liabilities.....	474,193	232,485	12,599	14,995		6,932
<b>RESERVES</b>						
Equity in Ontario Hydro Systems.....		7,860,431		29,074	35,917	
Other.....	2,029	109,607	519			
Total reserves.....	2,029	7,970,038	519	29,074	35,917	
<b>CAPITAL</b>						
Debentures redeemed.....	295,158	626,317	14,087	16,380	50,000	
Local sinking fund.....						
Accumulated net income invested in plant or held as working funds.....	551,765	2,918,252	35,099	68,261	94,643	189,214
Frequency standardization expense charged this year.....						
Total capital.....	846,923	3,544,569	49,186	84,641	144,643	189,214
	<b>1,323,145</b>	<b>11,747,092</b>	<b>62,304</b>	<b>128,710</b>	<b>180,560</b>	<b>196,146</b>
<b>B. OPERATING STATEMENTS</b>						
<b>REVENUE</b>						
Sales of electric energy.....	858,118	1,715,754	57,736	41,677	52,186	124,001
Other.....	1,017	55,033	263	319	1,205	1,767
Total revenue.....	<b>859,135</b>	<b>1,770,787</b>	<b>57,999</b>	<b>41,996</b>	<b>53,391</b>	<b>125,768</b>
<b>EXPENSE</b>						
Power purchased.....	516,133	1,174,245	25,738	23,802	31,544	78,202
Local generation.....		19,113				
Operation and maintenance.....	75,872	158,505	9,739	2,356	4,912	14,689
Administration.....	107,737	112,517	7,188	3,638	8,430	14,887
Fixed charges—interest and principal.....	33,795		4,440	2,251	1,566	545
—depreciation.....	41,910	80,827	2,879	2,428	3,092	4,672
—other.....						
Total expense.....	<b>775,447</b>	<b>1,545,207</b>	<b>49,984</b>	<b>34,475</b>	<b>49,544</b>	<b>112,995</b>
Net income or net expense.....	<b>83,688</b>	<b>225,580</b>	<b>8,015</b>	<b>7,521</b>	<b>3,847</b>	<b>12,773</b>
Number of customers.....	7,294	13,344	452	325	634	929

## Statements for the Year Ended December 31, 1959

Sturgeon Falls 6,281	Sudbury 47,971	Terrace Bay 1,862	Thessalon 1,741	Webbwood 590	West Ferris Twp. 4,682	TOTAL NORTHERN ONTARIO PROPERTIES	TOTAL ALL SYSTEMS
\$ 318,107 41,205	\$ 3,661,214 540,870	\$ 171,014 33,634	\$ 99,864 21,824	\$ 37,746 1,667	\$ 456,048 36,501	\$ 17,780,042 3,712,448	\$ 385,419,306 77,551,575
276,902	3,120,344	137,380	78,040	36,079	419,547	14,067,594	307,867,731
150	199,185	26,642	11,702	1,878	2,388	681,750	10,400,010
.....	75,200	65,000	.....	.....	.....	753,296	15,560,183
12,459	104,976	265	7,797	633	7,893	523,379	13,463,791
12,609	379,361	91,907	19,499	2,511	10,281	1,958,425	39,423,984
.....	141,604	.....	.....	.....	17,474	608,078	9,381,215
.....	.....	.....	.....	.....	.....	.....	1,726,182
2,747	18,868	2,023	3,437	1,623	5,469	102,509	2,421,279
2,747	160,472	2,023	3,437	1,623	22,943	710,587	13,528,676
.....	.....	61,098	.....	.....	.....	12,375,490	238,790,589
<b>292,258</b>	<b>3,660,177</b>	<b>292,408</b>	<b>100,976</b>	<b>40,213</b>	<b>452,771</b>	<b>29,112,096</b>	<b>599,610,980</b>
83,000	194,105	42,900	56,500	25,341	188,500	2,143,314	70,456,844
28,494	22,090	.....	5,371	711	93,191	639,511	10,589,995
10,021	112,281	.....	1,876	276	16,978	411,104	6,565,031
121,515	328,476	42,900	63,747	26,328	298,669	3,193,929	87,611,870
.....	.....	61,098	.....	.....	.....	12,375,490	238,790,589
526	16,635	.....	124	.....	724	140,681	2,864,918
526	16,635	61,098	124	.....	724	12,516,171	241,655,507
17,000	823,233	35,100	8,500	4,659	39,000	2,852,305	77,881,620
.....	.....	.....	.....	.....	.....	.....	1,726,182
153,217	2,491,833	153,310	28,605	9,226	114,378	10,549,691	190,444,985
.....	.....	.....	.....	.....	.....	.....	290,816
170,217	3,315,066	188,410	37,105	13,885	153,378	13,401,996	270,343,603
<b>292,258</b>	<b>3,660,177</b>	<b>292,408</b>	<b>100,976</b>	<b>40,213</b>	<b>452,771</b>	<b>29,112,096</b>	<b>599,610,980</b>
138,310 422	1,753,384 17,650	58,020 3,923	56,619 235	17,817 .....	193,641 3,578	8,205,190 123,818	175,686,813 2,400,070
<b>138,732</b>	<b>1,771,034</b>	<b>61,943</b>	<b>56,854</b>	<b>17,817</b>	<b>197,219</b>	<b>8,329,008</b>	<b>178,086,883</b>
82,516	940,089	35,923	27,782	5,733	104,291	5,005,772 19,113	111,160,867 531,076
.....	.....	.....	.....	.....	.....	884,613	17,065,080
14,450	277,690	2,722	5,233	4,921	30,001	770,560	14,954,828
20,894	169,719	5,349	11,915	2,220	22,768	281,617	6,824,770
8,627	70,202	5,625	5,176	2,634	20,845	401,164	10,030,350
7,098	89,360	4,328	2,638	769	8,833	.....	14,316
.....	.....	.....	.....	.....	.....	.....	.....
<b>133,585</b>	<b>1,547,060</b>	<b>53,947</b>	<b>52,744</b>	<b>16,277</b>	<b>186,738</b>	<b>7,362,839</b>	<b>160,581,287</b>
<b>5,147</b>	<b>223,974</b>	<b>7,996</b>	<b>4,110</b>	<b>1,540</b>	<b>10,481</b>	<b>966,169</b>	<b>17,505,596</b>
1,579	15,877	416	539	146	1,744	69,227	1,310,099



## INTRODUCTION TO STATEMENT "C" AND STATEMENT "D"

### STATEMENT "C"

Statement "C" is the schedule of resale rates for domestic, commercial, and power service in the municipal distribution systems receiving power from the Commission. From time to time as revision becomes necessary, these rates are adjusted to the new rate structures introduced in 1956.

#### Description of Classes of Service

Domestic rates are applicable to all electrical service for household purposes, with the exception of house heating and flat-rate water-heaters. Charges for normal domestic service are based on specified blocks of kilowatt-hours per month with suitable rates for each block. The account is subject to a minimum monthly charge and to a prompt payment discount of 10 per cent. For comparative purposes, net monthly bills are shown for metered energy consumptions of 100, 300, and 500 kilowatt-hours per month.

The water-heater rates shown in Statement "C" are for unmetered flat-rate service which is billed at a monthly rate per 100 watts of heater capacity. In many municipalities the flat-rate water-heater load is subject to peak-load control by the utility. The customer, of course, has the option of paying for water heating at regular rates through the regular metered service. House-heating rates quoted are for separately metered consumption where an area greater than 25 per cent of the total is heated by electricity.

Commercial rates are applicable to all electrical service supplied to stores, offices, churches, schools, public buildings, institutions, hospitals, hotels, restaurants, service stations, and other premises used for commercial purposes. The commercial rates are also used for billing sign and display lighting. In most municipalities on the new rate structures, commercial-type customers having connected loads of less than five kilowatts are billed at domestic rates. Otherwise commercial accounts consist of a monthly demand rate (with a minimum) applied to the customer's billing demand, plus energy rates for specified blocks of kilowatt-hours used, the size of the blocks varying in accordance with the customer's billing demand. The energy rates, depending on whether the old or new rate structures are in effect, are applied to either one or two blocks of kilowatt-hours based on 100 hours' monthly use of the billing demand, all remaining monthly kilowatt-hours being billed at a final energy rate. The account is subject to a minimum monthly charge and to a prompt payment discount of 10 per cent. The net monthly bills shown are calculated on the basis of a demand of one kilowatt for a use per month of 100, 200, and 300 hours. The corresponding bill for a demand of ten kilowatts for the same number of hours' use would be ten times the amounts shown, and for  $x$  kilowatts would be  $x$  times the amounts shown.

The rates for power service to customers of the municipal utilities and local systems provide for 24-hour unrestricted delivery at secondary distribution voltage. These rates, however, are not applicable to certain industrial customers who are served directly by the Commission.

The power service account, like the commercial service account, consists of a monthly demand rate applied to the customer's billing demand, plus energy rates for specified blocks of kilowatt-hours used, the size of the blocks varying in accordance with the customer's billing demand. The energy rates, depending on whether the old or new rate structures are in effect, are applied either to 50 hours' monthly use of the customer's billing demand at each of the first and second rates or to 100 hours' monthly use at each of these two rates. All remaining monthly kilowatt-hours are billed at a third energy rate. The account is subject to a prompt payment discount of 10 per cent. Customers providing their own step-down transformation are granted, on the basis of their billing demand, an allowance of 27¢ per kilowatt per month gross for service at sub-transmission voltage and 17¢ per kilowatt per month gross for service at primary distribution voltage. The net monthly bills shown are calculated on the same basis as for commercial service.

#### STATEMENT "D"

Statement "D" records revenue, consumption, number of customers, average consumption per customer, and average cost per kilowatt-hour for each of the three main classes of service in all the municipal systems served. The revenue and consumption from house heating and the use of flat-rate water-heaters are included in the totals shown, the flat-rate kilowatt-hours being estimated on the basis of 16.8 hours' use per day.

With the introduction of the new rate structures there may be a shift during the year of a substantial group of customers with small connected loads from commercial service rates to domestic service rates. For statistical purposes they will thereafter be included in the domestic service group. Similarly certain small power service customers may be reclassified under commercial service.

The average cost per kilowatt-hour shown is the average cost to the customer, that is the average revenue per kilowatt-hour received by the utility. Such a statistical average does not represent the utility's actual cost of delivering one kilowatt-hour. However, a comparison of this average over a number of years is some indication of the trend of cost in any one municipality, and the trend in all municipal systems combined may be seen in the table on page 188 and the graphs on page 189. Other things being equal, the average cost per kilowatt-hour would rise with an increase in rates. Consumption per customer, however, is continuously increasing, and domestic customers in particular are using an ever-increasing variety of electrical appliances, including flat-rate water-heaters. Such increased use, since it is billed at the low rates usually applicable to higher-consumption blocks of kilowatt-hours, is frequently reflected in a lower average cost per kilowatt-hour.

For power service customers, the relationship between demand (kilowatts required) and energy (kilowatt-hours of use) is an important factor in establishing the individual's average cost per kilowatt-hour. The use of the demand for only a few hours will result in a relatively small total bill but a high average cost per kilowatt-hour; the use of the same demand for several hours will increase the total bill but substantially reduce the average cost per kilowatt-hour. In other words, the average cost per kilowatt-hour varies inversely with the customer's load factor.

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Acton.....	45	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Ailsa Craig.....	45	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Ajax.....	37	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Alexandria.....	40	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Alfred.....	42	1.67	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Alliston.....	43	1.67	60	3.1	....	....	1.0	2.03	3.83	5.63
Almonte.....	35	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Alvinston.....	45	1.67	60	3.5	....	....	1.0	2.25	4.05	5.85
Amherstburg.....	38	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Ancaster Twp. (including Ancaster).....	43	....	60	4.2	....	....	1.2	2.70	4.86	7.02
Apple Hill.....	56	....	60	4.0	....	....	1.0	2.52	4.32	6.12
Arkona.....	43	....	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Arnprior.....	37	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Arthur.....	43	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Athens.....	40	....	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Atikokan Twp.....	40	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Aurora.....	37	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Avonmore.....	40	1.67	50	4.0	2.0	1.1	1.6	2.70	5.89	7.87
Aylmer.....	36	1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Ayr.....	44	....	60	2.9	....	....	1.0	1.93	3.73	5.53
Baden.....	40	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
†Bala.....	41	1.67	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Bancroft.....	53	1.67	60	3.5	....	....	1.3	2.36	4.70	7.04
Barrie.....	40	1.67	60	2.4	....	....	1.0	1.66	3.46	5.26
Barry's Bay.....	45	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Bath.....	39	1.67	60	3.5	....	....	1.2	2.32	4.48	6.64
Beachville.....	42	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Beamsville.....	41	1.67	60	2.7	....	....	1.2	1.89	4.05	6.21
†Beardmore.....	45	1.67	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Beaverton.....	45	1.67	60	2.8	....	....	1.2	1.94	4.10	6.26
Beeton.....	50	1.67	60	3.8	....	....	1.2	2.48	4.64	6.80
Belle River.....	42	1.67	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Belleville.....	35	1.67	60	1.8	....	....	0.8	1.26	2.70	4.14
Blenheim.....	44	1.67	50	2.8	1.4	....	0.8	1.89	4.14	5.58
†Blind River.....	45	1.67	50	3.8	1.9	1.1	1.5	2.56	5.62	7.60
Bloomfield.....	42	1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Blyth.....	45	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Bobcaygeon.....	40	1.67	60	3.4	....	....	1.2	2.27	4.43	6.59
Bolton.....	45	1.78	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Bothwell.....	45	1.67	60	2.6	....	....	1.0	1.76	3.56	5.36

†Local system

For explanatory notes and water-heating schedules see pages 264 to 267.

# Utilities and Local Systems FOR ELECTRICAL SERVICE December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand							First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours			
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours							100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
2.6	...	1.0	2.79	3.69	4.59	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.1	....	0.5	0.33	1.89	2.34	2.64
3.0	...	0.9	3.15	3.96	4.77	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
3.6	...	1.0	3.69	4.59	5.49	1.35	2.9	....	1.9	....	0.33	3.37	3.67	3.97
3.5	...	1.0	3.60	4.50	5.40	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.4	....	0.5	0.33	3.06	3.51	3.81
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°1.5	0.8	0.5	1.80	2.52	2.97	1.00	...	1.0	....	0.5	0.33	1.80	2.25	2.55
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
2.4	...	0.9	2.61	3.42	4.23	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
4.2	0.8	0.5	4.23	4.95	5.40	1.00	...	2.7	....	0.5	0.33	3.33	3.78	4.08
3.0	...	1.2	3.15	4.23	5.31	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
2.0	...	0.8	2.25	2.97	3.69	1.00	1.4	....	0.9	....	0.25	1.93	2.16	2.38
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
3.0	...	1.2	3.15	4.23	5.31	1.35	3.5	....	2.3	....	0.33	3.82	4.12	4.42
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
2.3	...	1.1	2.52	3.51	4.50	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
°3.8	0.8	0.5	3.87	4.59	5.04	1.00	...	2.9	....	0.5	0.33	3.51	3.96	4.26
2.2	...	1.0	2.43	3.33	4.23	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
3.4	...	1.2	3.51	4.59	5.67	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
1.6	...	0.6	1.89	2.43	2.97	1.00	1.3	....	0.8	....	0.25	1.84	2.07	2.29
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°3.6	0.8	0.5	3.69	4.41	4.86	1.00	...	2.7	....	0.5	0.33	3.33	3.78	4.08
°1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
2.9	...	1.0	3.06	3.96	4.86	1.35	2.3	....	1.5	....	0.33	2.92	3.22	3.52
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
2.1	...	0.7	2.34	2.97	3.60	1.35	2.3	....	1.5	....	0.33	2.92	3.22	3.52



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
Bowmanville.....	¢ No. 35	1.67	50	¢ 2.4	¢ 1.2	¢ 0.7	¢ 1.0	\$ 1.62	\$ 3.55	\$ 4.81
Bracebridge.....	39	....	60	3.0	....	....	1.2	2.05	4.21	6.37
Bradford.....	40	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Braeside.....	49	....	50	4.0	....	....	1.3	2.38	4.72	7.06
Brampton.....	37	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Brantford.....	41	1.67	60	2.2	....	....	1.2	1.62	3.78	5.94
§§ Brantford Twp.....	42	2.0	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Brechin.....	45	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Bridgeport.....	40	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Brigden.....	45	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Brighton.....	39	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Brockville.....	38	1.67	60	2.0	....	....	1.0	1.44	3.24	5.04
Brussels.....	45	1.67	60	3.2	....	....	1.0	2.09	3.89	5.69
Burford.....	43	....	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Burgessville.....	43	1.67	60	4.0	....	....	1.0	2.52	4.32	6.12
Burk's Falls.....	45	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
§ Burlington.....	42	1.67	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Cache Bay.....	45	....	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Caledonia.....	43	....	60	2.4	....	....	1.2	1.73	3.89	6.05
Campbellford.....	35	1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Campbellville.....	50	....	60	3.0	....	....	1.3	2.09	4.43	6.77
Cannington.....	48	....	60	3.2	....	....	1.0	2.09	3.89	5.69
Capreol.....	43	....	60	3.5	....	....	1.3	2.36	4.70	7.04
Cardinal.....	40	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Carleton Place.....	39	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Casselman.....	41	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Cayuga.....	42	....	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Chalk River.....	38	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Chapleau Twp.....	....	....	60	9.0	....	....	4.0	6.30	13.50	20.70
Chatham.....	41	1.67	60	3.8	....	....	1.4	2.56	5.08	7.60
Chatsworth.....	46	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Chesley.....	41	1.67	60	2.7	....	....	1.0	1.82	3.62	5.42
Chesterville.....	41	1.67	60	2.7	....	....	1.1	1.85	3.83	5.81
Chippawa.....	40	....	60	3.1	....	....	1.4	2.18	4.70	7.22
Clifford.....	45	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Clinton.....	41	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
† Cobalt.....	42	1.67	60	4.2	....	....	1.5	2.81	5.51	8.21
Cobden.....	33	1.67	50	1.6	0.8	0.5	1.0	1.08	2.38	3.28
Cobourg.....	41	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Cochrane.....	35	....	60	3.4	....	....	1.5	2.38	5.08	7.78

†Local system

For explanatory notes and water-heating schedules see pages 264 to 267.

# Utilities and Local Systems FOR ELECTRICAL SERVICE

December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
1.7	0.8	0.5	1.98	2.70	3.15	1.00	...	1.2	....	0.5	0.33	1.98	2.43	2.73
2.0	...	1.0	2.25	3.15	4.05	1.20	1.4	....	0.9	....	0.30	2.11	2.38	2.65
2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
4.0	...	1.0	4.05	4.95	5.85	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
1.8	...	0.7	2.07	2.70	3.33	1.20	1.4	....	0.9	....	0.30	2.11	2.38	2.65
2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
1.7	...	0.8	1.98	2.70	3.42	1.20	1.4	....	0.9	....	0.30	2.11	2.38	2.65
2.7	...	0.8	2.88	3.60	4.32	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
3.5	...	0.8	3.60	4.32	5.04	1.35	2.9	....	1.9	....	0.33	3.37	3.67	3.97
2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72
2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
3.5	0.8	0.5	3.60	4.32	4.77	1.00	...	3.0	....	0.5	0.33	3.60	4.05	4.35
1.9	...	1.1	2.16	3.15	4.14	1.35	2.3	....	1.5	....	0.33	2.92	3.22	3.52
1.2	0.8	0.5	1.53	2.25	2.70	1.00	...	0.7	....	0.5	0.33	1.53	1.98	2.28
2.8	...	1.1	2.97	3.96	4.95	1.35	3.5	....	2.3	....	0.33	3.82	4.12	4.42
2.8	...	0.9	2.97	3.78	4.59	1.35	2.2	....	1.4	....	0.33	2.83	3.13	3.43
3.0	...	1.1	3.15	4.14	5.13	1.35	2.9	....	1.9	....	0.33	3.37	3.67	3.97
2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
8.5	...	4.0	8.10	11.70	15.30	1.35	5.7	....	3.8	....	2.00	5.49	7.29	9.09
3.3	...	1.2	3.42	4.50	5.58	1.35	2.0	....	1.3	....	0.40	2.70	3.00	3.29
2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
2.3	...	1.0	2.52	3.42	4.32	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
2.2	...	1.1	2.43	3.42	4.41	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
2.6	...	1.3	2.79	3.96	5.13	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
3.1	0.8	0.5	3.24	3.96	4.41	1.00	...	2.6	....	0.5	0.33	3.24	3.69	3.99
2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
3.7	...	1.5	3.78	5.13	6.48	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
1.3	0.8	0.5	1.62	2.34	2.79	1.00	...	0.8	....	0.5	0.33	1.62	2.07	2.37
2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
2.9	...	1.4	3.06	4.32	5.58	1.35	2.3	....	1.5	....	0.33	2.92	3.22	3.52

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Colborne.....	43	1.67	60	3.8	....	....	1.0	2.41	4.21	6.01
Coldwater.....	45	....	60	3.2	....	....	1.0	2.09	3.89	5.69
Collingwood.....	41	1.67	60	2.5	....	....	1.1	1.75	3.73	5.71
Comber.....	45	....	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Coniston.....	42	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Cookstown.....	51	....	45	4.3	....	....	1.0	2.24	4.04	5.84
Cottam.....	41	....	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Courtright.....	43	....	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Creemore.....	44	1.67	50	3.1	....	....	1.0	1.84	3.64	5.44
Dashwood.....	45	....	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Deep River.....	40	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Delaware.....	44	1.67	60	3.8	....	....	1.4	2.56	5.08	7.60
Delhi.....	43	1.80	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Deseronto.....	40	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Dorchester.....	43	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Drayton.....	44	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Dresden.....	44	....	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Drumbo.....	45	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Dryden.....	35	....	60	4.5	....	....	1.5	2.97	5.67	8.37
Dublin.....	43	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Dundalk.....	44	....	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Dundas.....	40	1.67	60	2.8	....	....	1.1	1.91	3.89	5.87
Dunnville.....	45	1.78	60	2.6	....	....	1.5	1.94	4.64	7.34
Durham.....	42	1.67	60	2.7	....	....	1.1	1.85	3.83	5.81
Dutton.....	47	....	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
East York Twp.....	37	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Eganville.....	42	1.67	60	4.3	....	....	1.1	2.72	4.70	6.68
†Elk Lake Townsite.....	42	1.67	▲	▲	▲	▲	▲	2.30	4.60	6.60
Elmira.....	45	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Elmvale.....	40	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Elmwood.....	39	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Elora.....	44	....	60	3.2	....	....	1.4	2.23	4.75	7.27
Embro.....	44	1.67	60	3.3	....	....	1.1	2.18	4.16	6.14
†Englehart.....	42	1.67	60	4.5	....	....	1.5	2.97	5.67	8.37
Erieau.....	45	1.67	50	2.8	1.4	....	0.8	1.89	4.14	5.58
Erie Beach.....	45	1.67	50	4.0	2.0	....	1.1	2.70	5.89	7.87
Erin.....	40	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Essex.....	44	1.78	60	2.9	....	....	1.2	2.00	4.16	6.32
Etobicoke Twp. (including Thistletown)	37	1.67	60	2.7	....	....	1.3	1.93	4.27	6.61
Exeter.....	45	1.67	60	3.0	....	....	1.3	2.09	4.43	6.77

†Local system      ▲Special rates

For explanatory notes and water-heating schedules see pages 264 to 267.

# Utilities and Local Systems

## FOR ELECTRICAL SERVICE

### December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand			100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
First 100 hours	Next 100 hours	All addi- tional hours												
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
3.0	...	1.0	3.15	4.05	4.95	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
2.5	...	1.0	2.70	3.60	4.50	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
2.0	...	1.1	2.25	3.24	4.23	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
3.8	...	1.0	3.87	4.77	5.67	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
2.6	...	0.9	2.79	3.60	4.41	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
°3.1	0.8	0.5	3.24	3.96	4.41	1.00	...	2.4	....	0.5	0.33	3.06	3.51	3.81
2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
3.4	...	1.4	3.51	4.77	6.03	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
3.8	...	2.0	3.87	5.67	7.47	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.6	....	0.5	0.33	3.24	3.69	3.99
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
2.3	...	1.0	2.52	3.42	4.32	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
2.2	...	1.5	2.43	3.78	5.13	1.35	2.3	....	1.5	....	0.33	2.92	3.22	3.52
2.4	...	1.0	2.61	3.51	4.41	1.35	2.2	....	1.4	....	0.33	2.83	3.13	3.43
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°2.0	0.8	0.5	2.25	2.97	3.42	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82
3.8	...	1.0	3.87	4.77	5.67	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
▲	▲	▲	3.50	4.50	5.50	▲	▲	▲	▲	▲	▲	3.50	4.50	5.50
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
2.8	...	1.4	2.97	4.23	5.49	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
2.7	...	0.7	2.88	3.51	4.14	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10
4.0	...	1.5	4.05	5.40	6.75	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.5	....	0.5	0.33	3.15	3.60	3.90
°3.5	0.8	0.5	3.60	4.32	4.77	1.00	...	2.6	....	0.5	0.33	3.24	3.69	3.99
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
2.4	...	1.0	2.61	3.51	4.41	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
°2.2	...	0.8	2.43	3.15	3.87	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
2.6	...	0.8	2.79	3.51	4.23	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19



# Municipal Electrical RATES AND TYPICAL BILLS in effect

*Rates are quoted on a monthly basis and  
and a minimum*

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Fergus.....	41	1.67	60	3.3	....	....	1.3	2.25	4.59	6.93
Finch.....	42	....	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Flesherton.....	37	1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Fonthill.....	41	1.67	60	3.0	....	....	1.3	2.09	4.43	6.77
Forest.....	46	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Forest Hill.....	37	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Fort William.....	31	1.67	60	2.0	....	....	0.8	1.37	2.81	4.25
Frankford.....	36	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Galt.....	40	1.67	60	3.0	....	....	1.1	2.02	4.00	5.98
Georgetown.....	39	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Glen Williams.....	39	1.67	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
†Geraldton.....	45	1.67	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Glencoe.....	45	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Goderich.....	45	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
†Gogama.....	45	1.67	50	7.0	3.5	....	1.6	4.72	10.17	13.05
Grand Bend.....	45	1.78	60	4.4	....	....	1.5	2.92	5.62	8.32
Grand Valley.....	50	1.67	60	3.0	....	....	1.2	2.05	4.21	6.37
Granton.....	50	....	60	3.9	....	....	1.4	2.61	5.13	7.65
Gravenhurst.....	40	....	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Grimsby.....	43	1.67	60	2.5	....	....	1.1	1.75	3.73	5.71
Guelph.....	34	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Hagersville.....	41	1.67	60	2.8	....	....	1.1	1.91	3.89	5.87
†Haileybury.....	42	1.67	60	3.9	....	....	1.2	2.54	4.70	6.86
Hamilton.....	43	1.67	60	2.6	....	....	1.1	1.80	3.78	5.76
Hanover.....	38	1.67	60	2.2	....	....	1.0	1.55	3.35	5.15
Harriston.....	39	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Harrow.....	43	....	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Hastings.....	38	1.67	45	4.2	....	....	1.0	2.20	4.00	5.80
Havelock.....	40	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Hawkesbury.....	36	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Hearst.....	60	....	50	4.6	2.3	1.3	1.6	3.10	6.79	9.13
Hensall.....	45	1.67	60	3.2	....	....	1.0	2.09	3.89	5.69
†Hepworth.....	45	....	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Hespeler.....	42	1.67	60	3.2	....	....	1.1	2.12	4.10	6.08
Highgate.....	47	....	60	3.2	....	....	0.9	2.05	3.67	5.29
Holstein.....	41	1.67	60	3.0	....	....	1.0	1.98	3.78	5.58
†Hornepayne.....	60	....	60	8.0	....	....	2.0	5.04	8.64	12.24
†Hudson Townsite.....	45	1.67	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Huntsville.....	41	1.67	60	2.4	....	....	1.2	1.73	3.89	6.05
(†) Ignace.....	60	....	60	8.0	....	....	2.0	5.04	8.64	12.24
Ingersoll.....	44	1.67	60	3.4	....	....	1.3	2.30	4.64	6.98

†Local system  
For explanatory notes and water-heating schedules see pages 264 to 267.  
(†)Six months' operation at these rates—now served as part of Dryden R.O.A.

# Utilities and Local Systems

## FOR ELECTRICAL SERVICE

### December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	\$	\$	\$	
2.8	...	1.1	2.97	3.96	4.95	1.35	2.2	....	1.4	....	0.33	2.83	3.13	3.43
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
°1.6	0.8	0.5	1.89	2.61	3.06	1.00	...	1.0	....	0.5	0.33	1.80	2.25	2.55
2.5	...	1.2	2.70	3.78	4.86	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82
1.9	...	0.4	2.16	2.52	2.88	1.00	1.4	....	0.9	....	0.25	1.93	2.16	2.38
°1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.1	....	0.5	0.33	1.89	2.34	2.64
2.5	...	1.0	2.70	3.60	4.50	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°3.8	0.8	0.5	3.87	4.59	5.04	1.00	...	2.9	....	0.5	0.33	3.51	3.96	4.26
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.4	....	0.5	0.33	3.06	3.51	3.81
5.8	0.8	0.5	5.67	6.39	6.84	1.00	...	5.1	....	0.5	0.33	5.49	5.94	6.24
3.9	...	1.3	3.96	5.13	6.30	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10
2.5	...	1.2	2.70	3.78	4.86	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
3.4	...	1.3	3.51	4.68	5.85	1.35	2.6	....	1.7	....	0.33	3.15	3.45	3.74
°1.6	0.8	0.5	1.89	2.61	3.06	1.00	...	1.1	....	0.5	0.33	1.89	2.34	2.64
2.0	...	1.0	2.25	3.15	4.05	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
2.3	...	0.9	2.52	3.33	4.14	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92
3.4	...	1.2	3.51	4.59	5.67	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
d1.9	...	0.7	2.16	2.79	3.42	1.00	1.4	....	0.9	....	0.40	1.93	2.29	2.65
1.7	...	1.0	1.98	2.88	3.78	1.00	1.5	....	0.9	....	0.30	1.98	2.25	2.52
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
3.6	...	1.0	3.69	4.59	5.49	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
°3.2	0.8	0.5	3.33	4.05	4.50	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
°3.9	0.8	0.5	3.96	4.68	5.13	1.00	...	3.2	....	0.5	0.33	3.78	4.23	4.53
2.7	...	0.9	2.88	3.69	4.50	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
°3.2	0.8	0.5	3.33	4.05	4.50	1.00	...	2.4	....	0.5	0.33	3.06	3.51	3.81
2.6	...	0.9	2.79	3.60	4.41	1.20	1.6	....	1.0	....	0.33	2.25	2.55	2.84
2.8	...	0.7	2.97	3.60	4.23	1.35	2.6	....	1.7	....	0.33	3.15	3.45	3.74
2.5	...	0.8	2.70	3.42	4.14	1.35	3.5	....	2.3	....	0.33	3.82	4.12	4.42
7.5	...	2.0	7.20	9.00	10.80	1.35	4.9	....	3.3	....	0.33	4.90	5.20	5.50
°3.9	0.8	0.5	3.96	4.68	5.13	1.00	...	3.4	....	0.5	0.33	3.96	4.41	4.71
2.2	...	1.1	2.43	3.42	4.41	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
7.5	...	2.0	7.20	9.00	10.80	1.35	4.9	....	3.3	....	0.33	4.90	5.20	5.50
2.8	...	0.8	2.97	3.69	4.41	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

*Rates are quoted on a monthly basis and  
and a minimum*

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Iroquois.....	43	....	60	2.8	....	....	1.2	1.94	4.10	6.26
Jarvis.....	44	....	60	2.8	....	....	0.9	1.84	3.46	5.08
†Jellicoe Townsite.....	45	1.67	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Kapuskasing.....	35	....	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
†Kearns Townsite.....	45	1.67	b40	3.5	....	....	†1.6 \0.75	2.63	4.90	6.25
Kemptville.....	40	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Kincardine.....	45	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
†King Kirkland Townsite.....	42	1.67	b40	3.5	....	....	†1.6 \0.75	2.63	4.90	6.25
Kingston.....	38	1.67	60	1.8	....	....	0.9	1.30	2.92	4.54
Kingsville.....	40	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Kirkfield.....	45	....	50	5.0	....	....	1.2	2.79	4.95	7.11
†Kirkland Lake (including Swastika).....	42	1.67	▲	▲	▲	▲	▲	2.30	4.60	6.60
Kitchener.....	39	1.67	60	2.6	....	....	1.3	1.87	4.21	6.55
Lakefield.....	34	1.67	55	2.8	....	....	1.0	1.79	3.59	5.39
Lambeth.....	43	1.67	60	3.5	....	....	1.3	2.36	4.70	7.04
Lanark.....	39	1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Lancaster.....	39	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Larder Lake Twp.....	43	....	60	3.5	....	....	1.1	2.29	4.27	6.25
Latchford.....	44	....	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Leamington.....	41	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Lindsay.....	41	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Listowel.....	41	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
London.....	44	1.67	60	2.8	....	....	1.2	1.94	4.10	6.26
London Twp.....	39	....	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Long Branch.....	40	1.67	60	2.4	....	....	1.2	1.73	3.89	6.05
L'Orignal.....	40	1.67	50	4.2	2.1	1.2	1.6	2.83	6.21	8.37
Lucan.....	45	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Lucknow.....	45	....	55	2.7	....	....	1.0	1.75	3.55	5.35
Lynden.....	43	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Madoc.....	40	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Magnetawan.....	45	1.67	50	4.2	2.1	1.2	1.6	2.83	6.21	8.37
Markdale.....	45	1.67	60	2.5	....	....	1.0	1.71	3.51	5.31
Markham.....	44	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Marmora.....	43	1.67	60	3.6	....	....	1.0	2.30	4.10	5.90
Martintown.....	38	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Massey.....	45	....	50	5.0	2.5	1.4	1.6	3.37	7.38	9.90
†Matachewan Twp.....	45	1.67	50	4.5	....	....	1.0	2.47	4.27	6.07
†Matheson.....	45	1.67	b40	3.5	....	....	†1.6 \0.75	2.63	4.90	6.25
†Mattawa.....	45	1.67	50	5.2	2.6	....	1.6	3.51	7.74	10.62
Maxville.....	43	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31

†Local system      ▲Special rates

For explanatory notes and water-heating schedules see pages 264 to 267.

Utilities and Local Systems  
FOR ELECTRICAL SERVICE  
December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand							First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours			
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours							100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
2.3	...	1.0	2.52	3.42	4.32	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
2.3	...	0.6	2.52	3.06	3.60	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
°3.9	0.8	0.5	3.96	4.68	5.13	1.00	...	3.4	....	0.5	0.33	3.96	4.41	4.71
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
3.5	...	1.0	3.60	4.50	5.40	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
3.5	...	1.0	3.60	4.50	5.40	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
1.5	...	0.9	1.80	2.61	3.42	1.20	1.4	....	0.9	....	0.30	2.11	2.38	2.65
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
4.5	...	1.0	4.50	5.40	6.30	1.35	4.1	....	2.7	....	0.33	4.27	4.57	4.87
▲	▲	▲	3.50	4.50	5.50	▲	▲	▲	▲	▲	▲	3.50	4.50	5.50
2.3	...	1.0	2.52	3.42	4.32	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
2.4	...	0.8	2.61	3.33	4.05	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92
3.1	...	1.1	3.24	4.23	5.22	1.35	4.1	....	2.7	....	0.33	4.27	4.57	4.87
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
°2.0	0.8	0.5	2.25	2.97	3.42	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
3.0	...	1.0	3.15	4.05	4.95	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
2.2	...	0.6	2.43	2.97	3.51	1.20	1.4	....	0.9	....	0.30	2.11	2.38	2.65
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°1.9	...	1.1	2.16	3.15	4.14	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
2.2	...	0.8	2.43	3.15	3.87	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°3.7	0.8	0.5	3.78	4.50	4.95	1.00	...	2.8	....	0.5	0.33	3.42	3.87	4.17
2.0	...	1.0	2.25	3.15	4.05	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
3.2	...	0.9	3.33	4.14	4.95	1.35	2.3	....	1.5	....	0.33	2.92	3.22	3.52
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
°4.4	0.8	0.5	4.41	5.13	5.58	1.00	...	3.1	....	0.5	0.33	3.69	4.14	4.44
3.5	...	1.0	3.60	4.50	5.40	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
3.5	...	1.0	3.60	4.50	5.40	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
5.2	0.8	0.5	5.13	5.85	6.30	1.00	...	3.2	....	0.5	0.33	3.78	4.23	4.53
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number		DOMESTIC SERVICE								
			■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
					First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢	No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
McGarry.....		40	....	60	3.5	....	....	1.1	2.29	4.27	6.25
Meaford.....	46		1.67	60	2.6	....	....	1.0	1.76	3.56	5.36
Merlin.....	44		....	60	3.1	....	....	1.0	2.03	3.83	5.63
Merrickville.....		38	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Merritton.....		40	1.67	60	3.2	....	....	1.3	2.20	4.54	6.88
Midland.....		39	1.67	50	1.8	0.9	0.7	1.0	1.21	2.74	4.00
Mildmay.....	40		1.67	60	2.5	....	....	1.0	1.71	3.51	5.31
Millbrook.....		41	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Milton.....		43	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Milverton.....		45	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Mimico.....		37	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Mitchell.....		40	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Moorefield.....		43	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Morrisburg.....		40	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Mount Brydges.....		41	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Mount Forest.....	39		1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Napanee.....		38	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Neustadt.....	37		1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Newboro.....		38	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Newburgh.....		40	1.67	60	4.3	....	....	1.2	2.75	4.91	7.07
Newbury.....	50		....	60	4.0	....	....	1.0	2.52	4.32	6.12
Newcastle.....	43		1.67	60	3.0	....	....	0.9	1.94	3.56	5.18
New Hamburg.....		39	1.70	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
†New Liskeard.....		42	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Newmarket.....	40		....	60	2.5	....	....	1.0	1.71	3.51	5.31
New Toronto.....		37	1.67	60	2.6	....	....	1.2	1.84	4.00	6.16
Niagara.....		42	1.67	60	3.0	....	....	1.4	2.12	4.64	7.16
Niagara Falls.....	40		1.67	50	3.0	1.4	....	1.0	1.98	4.32	6.12
Nipigon Twp.....		30	1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
North Bay.....	42		1.67	60	2.5	....	....	1.2	1.78	3.94	6.10
North York Twp.....		37	1.67	60	2.7	....	....	1.3	1.93	4.27	6.61
Norwich.....	46		....	60	3.4	....	....	1.2	2.27	4.43	6.59
Norwood.....		42	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Oakville.....		41	1.67	60	3.0	....	....	1.4	2.12	4.64	7.16
Oil Springs.....		45	1.79	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Omeme.....	44		....	60	3.3	....	....	1.0	2.14	3.94	5.74
Orangeville.....	45		1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Orillia.....		36	1.67	60	2.3	....	....	0.9	1.57	3.19	4.81
Orono.....		38	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Oshawa.....		34	1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54

†Local system

For explanatory notes and water-heating schedules see pages 264 to 267.

# Utilities and Local Systems

## FOR ELECTRICAL SERVICE

### December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand			100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
First 100 hours	Next 100 hours	All addi- tional hours												
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
3.0	...	1.0	3.15	4.05	4.95	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10
2.2	...	0.8	2.43	3.15	3.87	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
2.6	...	0.7	2.79	3.42	4.05	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.1	....	0.5	0.33	1.89	2.34	2.64
2.7	...	1.1	2.88	3.87	4.86	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
°1.5	0.8	0.5	1.80	2.52	2.97	1.00	...	0.8	....	0.5	0.33	1.62	2.07	2.37
2.0	...	0.9	2.25	3.06	3.87	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82
°1.6	0.8	0.5	1.89	2.61	3.06	1.00	...	1.0	....	0.5	0.33	1.80	2.25	2.55
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
3.8	...	1.2	3.87	4.95	6.03	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
3.5	...	0.9	3.60	4.41	5.22	1.35	3.5	....	2.3	....	0.33	3.82	4.12	4.42
2.5	...	0.8	2.70	3.42	4.14	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.4	....	0.5	0.33	3.06	3.51	3.81
2.2	...	1.0	2.43	3.33	4.23	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
2.5	...	1.2	2.70	3.78	4.86	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.2	....	0.5	0.33	1.98	2.43	2.73
2.0	...	0.9	2.25	3.06	3.87	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
2.2	...	1.1	2.43	3.42	4.41	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92
3.0	...	1.0	3.15	4.05	4.95	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
2.5	...	1.3	2.70	3.87	5.04	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
2.8	...	0.8	2.97	3.69	4.41	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
1.8	...	0.8	2.07	2.79	3.51	1.00	1.4	....	0.9	....	0.30	1.93	2.20	2.47
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
°1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.2	....	0.5	0.33	1.98	2.43	2.73

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Ottawa (including East- view and Rockcliffe Park).....	32	....	a/60 60	*2.0 1.0	....	....	*0.5	1.74	3.02	3.92
Otterville.....	43	1.67	60	3.0	....	....	1.0	1.98	3.78	5.58
Owen Sound.....	38	1.67	60	2.4	....	....	1.1	1.69	3.67	5.65
Paisley.....	45	1.67	60	3.5	....	....	1.0	2.25	4.05	5.85
Palmerston.....	44	....	60	2.6	....	....	1.0	1.76	3.56	5.36
Paris.....	42	....	60	2.8	....	....	1.3	1.98	4.32	6.66
Parkhill.....	44	1.78	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Parry Sound.....	42	....	60	2.8	....	....	1.2	1.94	4.10	6.26
Penetanguishene.....	37	1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Perth.....	37	....	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Peterborough.....	40	1.67	60	2.6	....	....	1.3	1.87	4.21	6.55
Petrolia.....	45	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Pickering.....	37	1.67	50	4.0	2.0	1.1	1.6	2.70	5.89	7.87
†Pickle Lake Landing Townsite.....	45	1.67	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Picton.....	41	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Plattsville.....	42	....	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Point Edward.....	38	1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Port Arthur.....	34	1.67	60	2.0	....	....	0.8	1.37	2.81	4.25
Port Burwell.....	45	....	50	4.4	2.2	1.3	1.6	2.97	6.52	8.86
†Port Carling.....	41	1.67	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Port Colborne.....	41	1.67	60	2.8	....	....	1.2	1.94	4.10	6.26
Port Credit.....	38	1.67	60	2.7	....	....	1.3	1.93	4.27	6.61
Port Dalhousie.....	40	1.78	50	3.8	1.9	1.1	1.5	2.56	5.62	7.60
Port Dover.....	44	1.67	60	2.4	....	....	1.2	1.73	3.89	6.05
Port Elgin.....	45	1.80	60	3.5	....	....	1.3	2.36	4.70	7.04
Port Hope.....	40	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.00
Port McNicoll.....	39	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Port Perry.....	41	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Port Rowan.....	45	1.78	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Port Stanley.....	45	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
†Powassan.....	42	1.67	50	3.6	1.8	1.0	1.4	2.43	5.31	7.11
Prescott.....	37	....	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Preston.....	37	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Priceville.....	47	....	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Princeton.....	48	1.67	60	3.0	....	....	1.0	1.98	3.78	5.58
Queenston.....	40	1.67	60	2.8	....	....	1.3	1.98	4.32	6.66
Rainy River.....	57	....	50	6.8	3.4	....	1.6	4.59	9.90	12.78
†Red Lake Townsite.....	45	1.67	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Red Rock.....	32	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Renfrew.....	36	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08

†Local system  
For explanatory notes and water-heating schedules see pages 264 to 267.

# Utilities and Local Systems FOR ELECTRICAL SERVICE

December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents; minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand			100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
First 100 hours	Next 100 hours	All addi- tional hours												
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$
2.0	0.8	0.5	2.25	2.97	3.42	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
2.5	...	0.8	2.70	3.42	4.14	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
°2.0	0.8	0.5	2.25	2.97	3.42	1.00	1.5	....	1.1	....	0.30	2.07	2.34	2.61
3.0	...	1.0	3.15	4.05	4.95	1.35	2.6	....	1.7	....	0.33	3.15	3.45	3.74
2.2	...	0.8	2.43	3.15	3.87	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
2.3	...	0.8	2.52	3.24	3.96	1.00	1.5	....	1.1	....	0.30	2.07	2.34	2.61
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.2	....	0.5	0.33	2.88	3.33	3.63
2.3	...	1.2	2.52	3.60	4.68	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
°1.6	0.8	0.5	1.89	2.61	3.06	1.00	...	1.0	....	0.5	0.33	1.80	2.25	2.55
°1.7	0.8	0.5	1.98	2.70	3.15	1.00	...	0.9	....	0.5	0.33	1.71	2.16	2.46
2.1	...	1.2	2.34	3.42	4.50	1.20	1.4	....	0.9	....	0.30	2.11	2.38	2.65
3.2	0.8	0.5	3.33	4.05	4.50	1.00	...	2.7	....	0.5	0.33	3.33	3.78	4.08
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
°3.9	0.8	0.5	3.96	4.68	5.13	1.00	...	3.4	....	0.5	0.33	3.96	4.41	4.71
2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
1.9	...	0.4	2.16	2.52	2.88	1.00	1.4	....	0.9	....	0.25	1.93	2.16	2.38
°3.4	0.8	0.5	3.51	4.23	4.68	1.00	...	2.5	....	0.5	0.33	3.15	3.60	3.90
4.2	0.8	0.5	4.23	4.95	5.40	1.00	...	2.7	....	0.5	0.33	3.33	3.78	4.08
2.5	...	1.1	2.70	3.69	4.68	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
2.2	...	1.2	2.43	3.51	4.59	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72
2.0	...	1.0	2.25	3.15	4.05	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92
2.8	...	1.0	2.97	3.87	4.77	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.4	....	0.5	0.33	3.06	3.51	3.81
°3.4	0.8	0.5	3.51	4.23	4.68	1.00	...	2.7	....	0.5	0.33	3.33	3.78	4.08
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
3.8	0.8	0.5	3.87	4.59	5.04	1.00	...	2.9	....	0.5	0.33	3.51	3.96	4.26
2.7	...	0.8	2.88	3.60	4.32	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
2.4	...	1.2	2.61	3.69	4.77	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19
6.0	0.8	0.5	5.85	6.57	7.02	1.00	...	5.0	....	0.8	0.50	5.40	6.12	6.57
°3.9	0.8	0.5	3.96	4.68	5.13	1.00	...	3.4	....	0.5	0.33	3.96	4.41	4.71
°1.7	0.8	0.5	1.98	2.70	3.15	1.00	...	0.9	....	0.5	0.33	1.71	2.16	2.46
°1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.2	....	0.5	0.33	1.98	2.43	2.73



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Richmond.....	35	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Richmond Hill.....	43	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Ridgetown.....	45	.....	60	2.9	.....	.....	1.1	1.96	3.94	5.92
Ripley.....	43	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Riverside.....	36	1.67	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Rockland.....	36	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Rockwood.....	45	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Rodney.....	45	1.67	60	2.5	.....	.....	1.0	1.71	3.51	5.31
Rosseau.....	43	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Russell.....	36	1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
St. Catharines.....	42	1.67	60	2.7	.....	.....	1.5	2.00	4.70	7.40
St. Clair Beach.....	42	1.67	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
St. George.....	44	1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
St. Jacobs.....	42	1.67	60	3.0	.....	.....	1.1	2.02	4.00	5.98
St. Mary's.....	43	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
St. Thomas.....	43	1.67	60	3.2	.....	.....	1.2	2.16	4.32	6.48
Sandwich East Twp.....	41	1.67	50	4.4	2.2	1.2	1.6	2.97	6.48	8.64
Sandwich West Twp.....	41	1.67	50	4.2	2.1	1.2	1.6	2.83	6.21	8.37
Sarnia.....	40	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Scarborough Twp.....	37	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Schreiber Twp.....	31	.....	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Seaforth.....	36	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Shelburne.....	45	1.67	60	3.0	.....	.....	1.2	2.05	4.21	6.37
Simcoe.....	41	1.67	60	2.5	.....	.....	1.0	1.71	3.51	5.31
Sioux Lookout.....	51	.....	60	4.0	.....	.....	1.5	2.70	5.40	8.10
Smith's Falls.....	38	.....	60	2.6	.....	.....	1.0	1.76	3.56	5.36
Smithville.....	44	1.78	60	3.2	.....	.....	1.2	2.16	4.32	6.48
Southampton.....	45	.....	50	3.2	.....	.....	1.1	1.93	3.91	5.89
†South Porcupine Townsite.....	42	1.67	▲	▲	▲	▲	▲	2.30	4.60	6.60
Springfield.....	41	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Stamford Twp.....	40	1.67	60	3.2	.....	.....	1.4	2.23	4.75	7.27
Stayner.....	41	1.67	60	3.0	.....	.....	1.2	2.05	4.21	6.37
Stirling.....	38	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Stoney Creek.....	41	.....	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Stouffville.....	44	1.67	60	2.6	.....	.....	1.1	1.80	3.78	5.76
Stratford.....	40	1.67	60	2.9	.....	.....	1.2	2.00	4.16	6.32
Strathroy.....	37	1.67	60	3.1	.....	.....	0.9	2.00	3.62	5.24
Streetsville.....	43	1.67	60	2.9	.....	.....	1.3	2.03	4.37	6.71
Sturgeon Falls.....	40	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Sudbury.....	37	1.67	60	2.6	.....	.....	1.2	1.84	4.00	6.16

†Local system      ▲Special rates

For explanatory notes and water-heating schedules see pages 264 to 267.

# Utilities and Local Systems FOR ELECTRICAL SERVICE December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE									
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand			
Energy rate per kwh for use of each kw of demand															
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours	
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	¢	\$	\$	\$	
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54	
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54	
2.4	...	0.9	2.61	3.42	4.23	1.35	2.2	....	1.4	....	0.33	2.83	3.13	3.43	
°2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45	
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18	
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82	
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54	
2.2	...	0.8	2.43	3.15	3.87	1.35	2.2	....	1.4	....	0.33	2.83	3.13	3.43	
°2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.1	....	0.5	0.33	2.79	3.24	3.54	
°1.6	0.8	0.5	1.89	2.61	3.06	1.00	...	1.1	....	0.5	0.33	1.89	2.34	2.64	
d2.3	...	1.1	2.52	3.51	4.50	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06	
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72	
°1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00	
2.5	...	1.0	2.70	3.60	4.50	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92	
°2.5	0.8	0.5	2.70	3.42	3.87	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00	
2.3	...	0.6	2.52	3.06	3.60	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79	
°3.9	0.8	0.5	3.96	4.68	5.13	1.00	...	3.4	....	0.5	0.33	3.96	4.41	4.71	
°3.5	0.8	0.5	3.60	4.32	4.77	1.00	...	3.0	....	0.5	0.33	3.60	4.05	4.35	
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91	
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18	
°1.7	0.8	0.5	1.98	2.70	3.15	1.00	...	1.2	....	0.5	0.33	1.98	2.43	2.73	
°2.0	0.8	0.5	2.25	2.97	3.42	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00	
2.5	...	1.2	2.70	3.78	4.86	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92	
2.0	...	0.8	2.25	2.97	3.69	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92	
3.5	...	2.0	3.60	5.40	7.20	1.35	2.8	....	1.8	....	0.33	3.28	3.58	3.88	
2.0	...	0.7	2.25	2.88	3.51	1.00	1.5	....	1.1	....	0.25	2.07	2.29	2.52	
2.8	...	1.1	2.97	3.96	4.95	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65	
2.9	...	1.1	3.06	4.05	5.04	1.35	2.2	....	1.4	....	0.33	2.83	3.13	3.43	
▲	▲	▲	3.50	4.50	5.50	▲	▲	▲	▲	▲	▲	3.50	4.50	5.50	
°1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.4	....	0.5	0.33	2.16	2.61	2.91	
2.9	...	1.3	3.06	4.23	5.40	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06	
2.5	...	1.2	2.70	3.78	4.86	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06	
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82	
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18	
2.1	...	1.1	2.34	3.33	4.32	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29	
2.4	...	0.7	2.61	3.24	3.87	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92	
2.5	...	0.6	2.70	3.24	3.78	1.20	1.7	....	1.2	....	0.30	2.38	2.65	2.92	
2.4	...	1.3	2.61	3.78	4.95	1.20	2.1	....	1.4	....	0.30	2.65	2.92	3.19	
°2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45	
2.4	...	1.2	2.61	3.69	4.77	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29	

Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number	DOMESTIC SERVICE								
		■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
				First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	¢ No.	¢	No.	¢	¢	¢	¢	\$	\$	\$
Sunderland.....	45	....	60	3.5	....	....	1.0	2.25	4.05	5.85
Sundridge.....	45	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Sutton.....	45	1.78	60	2.7	....	....	1.0	1.82	3.62	5.42
Swansea.....	37	....	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Tara.....	44	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Tavistock.....	39	1.67	60	2.7	....	....	1.4	1.96	4.48	7.00
Tecumseh.....	41	1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Teeswater.....	42	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Terrace Bay.....	35	....	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
Thamesford.....	45	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Thamesville.....	45	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Thedford.....	45	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Thessalon.....	48	1.67	50	4.0	2.0	1.2	1.6	2.70	5.94	8.10
Thornbury.....	42	1.67	60	3.5	....	....	1.3	2.36	4.70	7.04
Thornedale.....	42	1.67	50	3.6	1.8	1.0	1.4	2.43	5.31	7.11
†Thornloe.....	42	1.67	▲	▲	▲	▲	▲	2.30	4.60	6.60
Thornton.....	39	....	60	3.8	....	....	1.0	2.41	4.21	6.01
Thorold.....	40	1.67	60	2.7	....	....	1.4	1.96	4.48	7.00
Tilbury.....	45	1.67	50	3.0	1.5	0.9	1.2	2.02	4.45	6.07
Tillsonburg.....	40	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
†Timmins (including Schumacher).....	42	1.67	▲	▲	▲	▲	▲	2.30	4.60	6.60
Toronto (including Leaside).....	**	2.10	60	2.0	....	....	1.4	1.58	4.10	6.62
Toronto Twp.....	37	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
Tottenham.....	44	1.67	50	3.5	....	....	1.0	2.02	3.82	5.62
Trafalgar Twp.....	37	1.67	50	3.8	1.9	1.1	1.5	2.56	5.62	7.60
Trenton.....	33	1.67	60	1.8	....	....	0.8	1.26	2.70	4.14
Tweed.....	37	1.67	50	1.8	0.9	0.7	1.0	1.21	2.74	4.00
Uxbridge.....	39	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
Vankleek Hill.....	40	1.67	50	3.4	1.7	1.0	1.4	2.29	5.04	6.84
Victoria Harbour.....	43	1.67	60	3.2	....	....	1.3	2.20	4.54	6.88
Walkerton.....	38	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Wallaceburg.....	41	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Wardsville.....	52	....	60	3.6	....	....	0.9	2.27	3.89	5.51
Warkworth.....	38	1.67	50	2.6	1.3	0.8	1.1	1.75	3.87	5.31
Wasaga Beach.....	42	....	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
Waterdown.....	42	....	60	2.6	....	....	1.2	1.84	4.00	6.16
Waterford.....	42	....	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Waterloo.....	35	1.67	60	2.6	....	....	1.1	1.80	3.78	5.76
Watford.....	45	....	60	3.1	....	....	1.1	2.07	4.05	6.03
Waubashene.....	45	....	60	3.2	....	....	1.2	2.16	4.32	6.48

†Local system      ▲Special rates

For explanatory notes and water-heating schedules see pages 264 to 267.

# Utilities and Local Systems

## FOR ELECTRICAL SERVICE

### December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	\$	\$	\$	
3.0	...	0.8	3.15	3.87	4.59	1.35	3.2	...	2.1	...	0.33	3.60	3.90	4.19
3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.5	...	0.5	0.33	3.15	3.60	3.90
2.4	...	0.7	2.61	3.24	3.87	1.35	2.0	...	1.3	...	0.33	2.70	3.00	3.29
1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.3	...	0.5	0.33	2.07	2.52	2.82
2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	...	0.5	0.33	2.61	3.06	3.36
2.3	...	1.4	2.52	3.78	5.04	1.35	2.2	...	1.4	...	0.33	2.83	3.13	3.43
2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	1.9	...	0.5	0.33	2.61	3.06	3.36
2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.8	...	0.5	0.33	2.52	2.97	3.27
1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.3	...	0.5	0.33	2.07	2.52	2.82
2.9	0.8	0.5	3.06	3.78	4.23	1.00	...	2.4	...	0.5	0.33	3.06	3.51	3.81
2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.7	...	0.5	0.33	2.43	2.88	3.18
2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.8	...	0.5	0.33	2.52	2.97	3.27
4.0	0.8	0.5	4.05	4.77	5.22	1.00	...	3.2	...	0.5	0.33	3.78	4.23	4.53
3.1	...	1.3	3.24	4.41	5.58	1.20	1.9	...	1.3	...	0.30	2.52	2.79	3.06
3.2	0.8	0.5	3.33	4.05	4.50	1.00	...	2.4	...	0.5	0.33	3.06	3.51	3.81
▲	▲	▲	3.50	4.50	5.50	▲	▲	▲	▲	▲	▲	3.50	4.50	5.50
3.3	...	1.0	3.42	4.32	5.22	1.35	2.8	...	1.8	...	0.33	3.28	3.58	3.88
2.2	...	1.2	2.43	3.51	4.59	1.20	1.7	...	1.2	...	0.30	2.38	2.65	2.92
2.6	0.8	0.5	2.79	3.51	3.96	1.00	...	1.9	...	0.5	0.33	2.61	3.06	3.36
2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.6	...	0.5	0.33	2.34	2.79	3.09
▲	▲	▲	3.50	4.50	5.50	▲	▲	▲	▲	▲	▲	3.50	4.50	5.50
c2.1	...	0.7	2.65	3.28	3.91	1.10	2.1	...	1.4	...	0.38	2.56	2.91	3.25
2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.7	...	0.5	0.33	2.43	2.88	3.18
3.0	...	1.0	3.15	4.05	4.95	1.35	2.8	...	1.8	...	0.33	3.28	3.58	3.88
3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.4	...	0.5	0.33	3.06	3.51	3.81
1.6	...	0.6	1.89	2.43	2.97	1.00	1.5	...	1.1	...	0.25	2.07	2.29	2.52
1.6	0.8	0.5	1.89	2.61	3.06	1.00	...	0.8	...	0.5	0.33	1.62	2.07	2.37
2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	...	0.5	0.33	2.61	3.06	3.36
2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.0	...	0.5	0.33	2.70	3.15	3.45
2.7	...	1.3	2.88	4.05	5.22	1.35	2.8	...	1.8	...	0.33	3.28	3.58	3.88
2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.4	...	0.5	0.33	2.16	2.61	2.91
1.9	0.8	0.5	2.16	2.88	3.33	1.00	...	1.3	...	0.5	0.33	2.07	2.52	2.82
3.2	...	0.8	3.33	4.05	4.77	1.35	2.8	...	1.8	...	0.33	3.28	3.58	3.88
2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.5	...	0.5	0.33	2.25	2.70	3.00
3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.5	...	0.5	0.33	3.15	3.60	3.90
2.2	...	1.2	2.43	3.51	4.59	1.20	1.9	...	1.3	...	0.30	2.52	2.79	3.06
2.7	0.8	0.5	2.88	3.60	4.05	1.00	...	2.0	...	0.5	0.33	2.70	3.15	3.45
2.2	...	1.0	2.43	3.33	4.23	1.20	2.1	...	1.4	...	0.30	2.65	2.92	3.19
2.8	...	0.9	2.97	3.78	4.59	1.35	2.5	...	1.6	...	0.33	3.06	3.36	3.65
2.6	...	1.2	2.79	3.87	4.95	1.35	3.2	...	2.1	...	0.33	3.60	3.90	4.19



Municipal Electrical  
RATES AND TYPICAL BILLS  
in effect

Rates are quoted on a monthly basis and  
and a minimum

Municipality	Flat-rate water-heating per 100 watts or schedule number		DOMESTIC SERVICE								
			■ House heating per kwh	Number of kwh supplied in first block	Rate per kwh for				Net monthly bill for		
					First block of kwh	Next 200 kwh	Next 500 kwh	All addi- tional kwh	100 kwh	300 kwh	500 kwh
	£	No.	£	No.	£	£	£	£	\$	\$	\$
Webbwood.....		43	.....	60	6.0	.....	.....	2.5	4.14	8.64	13.14
Welland.....		41	1.67	60	2.4	.....	.....	1.1	1.69	3.67	5.65
Wellesley.....		44	1.67	60	3.3	.....	.....	1.3	2.25	4.59	6.93
Wellington.....	41		1.67	50	2.0	1.0	0.7	1.0	1.35	3.01	4.27
West Ferris Twp.....		37	1.67	50	3.6	1.8	1.1	1.5	2.43	5.35	7.33
West Lorne.....		45	1.67	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Weston.....		37	1.67	60	2.5	.....	.....	1.2	1.78	3.94	6.10
Westport.....		38	1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Wheatley.....		45	1.67	60	3.3	.....	.....	1.2	2.21	4.37	6.53
Whitby.....		36	1.67	50	3.0	1.5	0.8	1.2	2.02	4.41	5.85
†White River.....		60	.....	50	7.0	3.5	.....	1.6	4.72	10.17	13.05
Warton.....	43		1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Williamsburg.....		40	.....	60	2.0	.....	.....	0.8	1.37	2.81	4.25
Winchester.....		41	1.67	60	2.5	.....	.....	1.2	1.78	3.94	6.10
Windermere.....	45		1.67	50	3.2	1.6	1.0	1.4	2.16	4.77	6.57
Windsor.....	40		1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Wingham.....	44		1.67	50	2.4	1.2	0.7	1.0	1.62	3.55	4.81
Woodbridge.....		42	1.67	50	2.8	1.4	0.8	1.1	1.89	4.14	5.58
Woodstock.....		36	1.67	50	3.2	1.6	0.9	1.3	2.16	4.72	6.34
Woodville.....		45	1.67	60	3.8	.....	.....	1.2	2.48	4.64	6.80
Wyoming.....		45	1.67	50	2.6	1.3	0.7	1.0	1.75	3.82	5.08
York Twp.....	42		1.67	50	2.2	1.1	0.7	1.0	1.48	3.28	4.54
Zurich.....		45	.....	60	3.7	.....	.....	1.2	2.43	4.59	6.75

†Local system

NOTES

Service Charges

- a 33¢ per month per service when the permanently installed appliance load is under 2,000 watts and 66¢ per month when 2,000 watts or more.
- b 56¢ per month.
- c Demand rate 8.5¢ per 100 watts, minimum 50¢.
- d Minimum demand charge 25¢.

■ House Heating

Applicable where electric energy is used to heat an entire dwelling or a portion of a dwelling in excess of 25% of the floor area.

# Utilities and Local Systems FOR ELECTRICAL SERVICE

## December 31, 1959

are subject to 10% prompt payment discount  
monthly charge

COMMERCIAL SERVICE						POWER SERVICE								
Demand rate per 100 watts 5.0 cents, minimum 50 cents			Net monthly bill for use of 1 kw of demand			Demand rate per kw	Energy rate per kwh for use of each kw of demand					Net monthly bill for use of 1 kw of demand		
Energy rate per kwh for use of each kw of demand														
First 100 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours		First 50 hours	First 100 hours	Next 50 hours	Next 100 hours	All addi- tional hours	100 hours	200 hours	300 hours
¢	¢	¢	\$	\$	\$	\$	¢	¢	¢	¢	\$	\$	\$	
5.5	...	2.5	5.40	7.65	9.90	1.35	3.5	....	2.3	....	0.33	3.82	4.12	4.42
2.1	...	1.0	2.34	3.24	4.14	1.20	1.9	....	1.3	....	0.30	2.52	2.79	3.06
2.8	...	1.2	2.97	4.05	5.13	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
°1.8	0.8	0.5	2.07	2.79	3.24	1.00	...	1.3	....	0.5	0.33	2.07	2.52	2.82
°3.0	0.8	0.5	3.15	3.87	4.32	1.00	...	2.0	....	0.5	0.33	2.70	3.15	3.45
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72
2.0	...	1.0	2.25	3.15	4.05	1.20	1.6	....	1.0	....	0.30	2.25	2.52	2.79
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
2.9	...	1.2	3.06	4.14	5.22	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
°5.8	0.8	0.5	5.67	6.39	6.84	1.00	...	5.1	....	0.5	0.33	5.49	5.94	6.24
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.7	....	0.5	0.33	2.43	2.88	3.18
2.0	...	0.8	2.25	2.97	3.69	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10
2.0	...	1.1	2.25	3.24	4.23	1.35	2.0	....	1.3	....	0.33	2.70	3.00	3.29
°2.8	0.8	0.5	2.97	3.69	4.14	1.00	...	2.3	....	0.5	0.33	2.97	3.42	3.72
°2.2	0.8	0.5	2.43	3.15	3.60	1.00	...	1.5	....	0.5	0.33	2.25	2.70	3.00
°2.1	0.8	0.5	2.34	3.06	3.51	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.8	....	0.5	0.33	2.52	2.97	3.27
°2.3	0.8	0.5	2.52	3.24	3.69	1.00	...	1.6	....	0.5	0.33	2.34	2.79	3.09
3.2	...	1.2	3.33	4.41	5.49	1.35	2.5	....	1.6	....	0.33	3.06	3.36	3.65
°2.4	0.8	0.5	2.61	3.33	3.78	1.00	...	1.9	....	0.5	0.33	2.61	3.06	3.36
°1.7	0.8	0.5	1.98	2.70	3.15	1.00	...	1.2	....	0.5	0.33	1.98	2.43	2.73
3.4	...	0.9	3.51	4.32	5.13	1.35	3.1	....	2.0	....	0.33	3.51	3.81	4.10

### NOTES

#### Special Rates or Discounts

‡2-wire service next 80 kwh; 3-wire service next 180 kwh.

\*First 60 kwh of monthly consumption at 2.0¢, second 60 kwh and all kwh in excess of 1,000 at 1.0¢.

\*\*Flat-rate water-heater service—Toronto:

System-owned—First 400 watts \$2.90 per month.

Each 100 watts additional 40¢ per month, plus a monthly charge for larger tank sizes as follows:

30¢ for 1,000-watt and 1,200-watt heaters.

40¢ for 1,500-watt heaters.

50¢ for 2,000-watt and 2,500-watt heaters.

55¢ for heaters 3,000 watts and over.

Customer-owned—First 400 watts \$1.98 per month.

Each 100 watts additional 40¢ per month.

°Commercial customers with a connected load of under 5 kilowatts billed at domestic rates.

§Farm customers billed at standard rural rates.

§§Farm customers billed at special rates.

Municipal Electrical  
GROSS MONTHLY ENERGY RATES

Subject to 10%

Element rating	SCHEDULE																
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
watts	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
400	1.00	1.04	1.08	1.12	1.16	1.20	1.24	1.28	1.32	1.36	1.40	1.44	1.48	1.52	1.56	1.60	1.64
450	1.12	1.17	1.21	1.26	1.30	1.36	1.40	1.44	1.49	1.53	1.58	1.62	1.67	1.71	1.76	1.80	1.84
500	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05
550	1.38	1.43	1.49	1.54	1.60	1.66	1.70	1.76	1.81	1.87	1.92	1.98	2.03	2.09	2.14	2.20	2.26
600	1.50	1.56	1.62	1.68	1.74	1.80	1.86	1.92	1.98	2.04	2.10	2.16	2.22	2.28	2.34	2.40	2.46
650	1.59	1.66	1.71	1.78	1.84	1.91	1.97	2.03	2.10	2.16	2.22	2.29	2.36	2.41	2.48	2.54	2.61
700	1.68	1.74	1.81	1.88	1.94	2.01	2.08	2.14	2.21	2.28	2.34	2.41	2.48	2.54	2.61	2.68	2.74
750	1.78	1.84	1.91	1.99	2.06	2.12	2.20	2.27	2.34	2.41	2.48	2.56	2.62	2.69	2.77	2.83	2.91
800	1.86	1.93	2.00	2.08	2.16	2.22	2.30	2.38	2.44	2.52	2.60	2.67	2.74	2.82	2.90	2.97	3.04
850	1.94	2.02	2.10	2.18	2.26	2.33	2.41	2.49	2.57	2.64	2.72	2.80	2.88	2.96	3.03	3.11	3.19
900	2.04	2.12	2.20	2.29	2.37	2.44	2.53	2.61	2.69	2.78	2.86	2.93	3.02	3.10	3.18	3.27	3.34
950	2.13	2.22	2.30	2.39	2.48	2.56	2.64	2.73	2.81	2.90	2.99	3.07	3.16	3.24	3.33	3.41	3.50
1,000	2.22	2.31	2.40	2.49	2.58	2.67	2.76	2.84	2.93	3.02	3.11	3.20	3.29	3.38	3.47	3.56	3.64

NOTE: Gross monthly rates for all element sizes over 1,000 watts are calculated as follows:

Rate for 1,000-watt element X  $\frac{\text{Element rating}}{1,000}$

Utilities and Local Systems  
FOR FLAT-RATE WATER-HEATING

*prompt payment discount*

NUMBER																		
42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1.68	1.72	1.76	1.80	1.84	1.88	1.92	1.96	2.00	2.04	2.08	2.12	2.16	2.20	2.24	2.28	2.32	2.36	2.40
1.89	1.93	1.98	2.02	2.07	2.11	2.16	2.20	2.26	2.29	2.34	2.38	2.42	2.47	2.52	2.56	2.60	2.66	2.72
2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00
2.31	2.37	2.42	2.48	2.53	2.59	2.64	2.70	2.76	2.81	2.86	2.92	2.98	3.03	3.08	3.14	3.20	3.26	3.32
2.52	2.58	2.64	2.70	2.76	2.82	2.88	2.94	3.00	3.06	3.12	3.18	3.24	3.30	3.36	3.42	3.48	3.54	3.60
2.67	2.73	2.80	2.86	2.92	2.99	3.06	3.11	3.18	3.25	3.32	3.37	3.42	3.49	3.56	3.62	3.68	3.75	3.82
2.81	2.88	2.94	3.01	3.08	3.14	3.21	3.28	3.34	3.42	3.48	3.55	3.62	3.69	3.76	3.82	3.88	3.95	4.02
2.98	3.04	3.12	3.19	3.26	3.33	3.40	3.48	3.54	3.62	3.68	3.75	3.82	3.90	3.98	4.05	4.12	4.18	4.24
3.12	3.19	3.27	3.34	3.41	3.49	3.57	3.63	3.71	3.79	3.86	3.93	4.00	4.08	4.16	4.24	4.32	4.38	4.44
3.27	3.34	3.42	3.50	3.58	3.66	3.73	3.81	3.90	3.96	4.04	4.12	4.20	4.28	4.36	4.44	4.52	4.59	4.66
3.42	3.51	3.59	3.67	3.76	3.83	3.91	4.00	4.08	4.16	4.24	4.32	4.40	4.49	4.58	4.66	4.74	4.81	4.88
3.59	3.67	3.76	3.84	3.92	4.01	4.10	4.18	4.27	4.35	4.44	4.52	4.60	4.69	4.78	4.87	4.96	5.04	5.12
3.73	3.82	3.91	4.00	4.09	4.18	4.27	4.36	4.44	4.53	4.62	4.71	4.80	4.89	4.98	5.07	5.16	5.25	5.34



Forty Major Municipal  
(Arranged in descending order  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Total revenue including street lighting	Total consumption including street lighting	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	\$	kwh	\$	kwh	No.	kwh	¢
Toronto (including Leaside) . . . . .	36,287,666	3,079,038,469	11,650,639	934,446,700	171,270	455	1.25
Hamilton . . . . .	14,927,861	1,820,001,428	3,845,815	331,314,240	66,846	413	1.16
◆ Ottawa (including Eastview and Rockcliffe Park) . . . . .	9,514,931	982,737,255	4,159,324	545,137,135	73,730	616	0.76
◆ Sarnia . . . . .	5,205,079	794,403,146	676,689	53,918,775	13,948	322	1.26
North York Twp. . . . .	8,494,258	733,933,153	4,809,050	446,522,972	68,461	544	1.08
◆ Scarborough Twp. . . . .	6,808,265	563,546,582	4,002,121	327,945,558	58,416	...	1.22
Etobicoke Twp. (including Thistletown) . . . . .	5,728,037	535,718,557	3,186,882	289,666,350	44,112	547	1.10
◆ Windsor . . . . .	4,353,098	370,951,787	1,413,068	125,847,059	34,236	306	1.12
London . . . . .	3,881,312	348,237,175	1,509,821	119,599,178	28,989	344	1.26
◆ York Twp. . . . .	3,204,911	318,818,999	2,005,268	210,947,435	38,132	461	0.95
Kitchener . . . . .	3,547,070	304,256,287	1,398,760	121,493,197	20,153	502	1.15
◆ Oshawa . . . . .	2,620,595	299,029,362	907,640	106,603,761	16,785	529	0.85
◆ Toronto Twp. . . . .	2,722,930	295,343,608	997,781	93,339,144	14,306	544	1.07
Brantford . . . . .	2,129,460	202,347,594	863,744	76,704,734	14,896	429	1.13
St. Catharines . . . . .	2,348,607	196,558,523	760,630	56,753,818	12,120	390	1.34
Kingston . . . . .	1,933,615	187,465,903	814,512	88,526,292	12,875	573	0.92
Port Arthur . . . . .	1,715,754	187,151,419	703,373	83,730,590	11,699	596	0.84
Fort William . . . . .	1,659,220	186,757,084	739,932	93,956,809	11,744	667	0.79
Peterborough . . . . .	1,947,840	181,921,550	885,395	81,092,002	12,826	527	1.09
◆ East York Twp. . . . .	1,813,935	171,652,303	1,190,637	115,520,123	21,164	455	1.03
◆ Guelph . . . . .	1,602,816	154,171,913	692,259	62,950,394	10,629	494	1.10
◆ New Toronto . . . . .	1,266,280	153,156,882	214,496	19,599,006	3,688	443	1.09
Sudbury . . . . .	1,753,384	128,710,354	974,275	82,564,296	14,045	490	1.18
◆ Burlington . . . . .	1,744,590	122,776,813	1,184,640	84,709,993	12,437	568	1.40
◆ Trafalgar Twp. . . . .	1,141,168	107,529,389	587,443	47,092,740	6,748	582	1.25
Galt . . . . .	1,175,365	100,169,728	472,137	39,722,672	7,612	435	1.19
Belleville . . . . .	866,243	99,571,324	419,000	51,971,446	8,160	531	0.81
Merriton . . . . .	792,100	99,301,660	101,740	7,969,166	1,732	383	1.28
◆ Woodstock . . . . .	968,396	86,689,662	409,383	34,395,558	6,193	463	1.19
Chatham . . . . .	1,366,430	84,630,992	397,560	22,024,564	8,027	229	1.81
◆ Niagara Falls . . . . .	987,926	83,735,697	379,184	30,107,379	6,923	362	1.26
Trenton . . . . .	605,649	83,254,585	178,158	22,095,508	3,515	524	0.81
Barrie . . . . .	782,710	76,324,239	386,050	38,195,744	5,914	538	1.01
Stamford Twp. . . . .	1,007,702	74,658,669	555,521	43,875,596	8,147	449	1.27
St. Thomas . . . . .	820,663	72,085,122	357,504	28,648,810	6,171	387	1.25
◆ Waterloo . . . . .	826,390	70,756,001	377,490	36,503,360	5,449	558	1.03
Stratford . . . . .	861,627	70,402,144	420,948	36,265,548	6,130	493	1.16
◆ Brockville . . . . .	681,807	70,262,460	268,052	26,203,666	4,770	458	1.02
North Bay . . . . .	858,118	69,576,115	439,253	37,727,558	6,115	514	1.16
Orillia . . . . .	716,446	67,831,279	247,401	25,239,717	4,545	463	0.98

For explanation of symbols see page 288

**Electrical Utilities**  
**of total consumption)**  
**AND CONSUMPTION**  
**December 31, 1959**

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers monthly loads billed	Monthly consumption per customer	Ave- rage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
9,079,047	619,237,710	27,137	1,902	1.47	14,676,497	1,478,649,419	6,798	393,313	18,126	0.99
2,098,394	168,270,990	8,037	1,745	1.25	8,646,178	1,303,357,328	1,391	258,332	78,083	0.66
4,513,479	377,827,799	10,482	3,004	1.19	523,646	48,164,749	204	17,646	19,675	1.09
321,877	22,750,072	788	2,406	1.41	4,148,207	715,448,699	169	95,156	352,785	0.58
2,039,205	130,922,471	5,423	2,012	1.56	1,477,129	144,690,750	1,040	48,315	11,594	1.02
1,159,418	81,427,999	2,160	.....	1.42	1,425,594	144,705,405	296	40,850	.....	0.99
831,083	57,489,780	**1,615	2,966	1.45	1,530,075	180,464,023	785	49,295	19,158	0.85
811,667	61,845,874	2,067	2,493	1.31	1,891,884	173,880,134	747	63,933	19,398	1.09
947,995	70,579,939	2,899	2,029	1.34	1,285,123	152,077,063	431	41,925	29,404	0.85
450,569	35,702,482	1,113	2,673	1.26	623,118	66,717,082	480	21,854	11,583	0.93
659,507	41,843,081	1,711	2,038	1.58	1,381,991	136,007,409	365	38,833	31,052	1.02
369,918	30,893,100	1,498	1,719	1.20	1,241,479	156,528,501	258	39,778	50,558	0.79
314,425	22,763,781	1,072	1,770	1.38	1,347,846	177,154,375	147	32,939	100,428	0.76
345,100	27,524,336	1,545	1,485	1.25	859,553	95,147,804	297	30,566	26,697	0.90
454,770	27,015,134	1,601	1,406	1.68	1,066,893	109,783,171	259	31,277	35,323	0.97
652,458	54,360,575	2,027	2,235	1.20	407,825	42,487,024	235	13,213	15,066	0.96
363,943	33,127,819	1,475	1,872	1.10	591,618	67,322,210	170	25,042	33,001	0.88
352,667	34,762,237	1,492	1,942	1.01	486,396	54,997,638	228	20,503	20,101	0.88
426,950	27,396,150	1,413	1,616	1.56	570,576	70,484,118	248	19,364	23,684	0.81
217,782	15,784,777	736	1,787	1.38	332,732	37,382,603	207	10,569	15,049	0.89
267,288	19,355,299	959	1,682	1.38	596,288	69,922,820	145	18,710	40,186	0.85
93,468	6,950,289	212	2,732	1.34	943,456	126,039,937	88	26,808	119,356	0.75
518,974	30,149,474	1,629	1,542	1.72	176,654	13,980,040	203	5,202	5,739	1.26
245,132	14,595,294	514	2,366	1.68	302,003	22,849,926	135	7,402	14,105	1.32
62,536	3,165,620	121	2,180	1.98	485,047	57,103,029	69	9,999	68,965	0.85
181,044	10,428,741	797	1,090	1.74	471,496	48,006,315	206	15,587	19,420	0.98
225,193	19,521,918	1,127	1,444	1.15	197,863	26,898,602	163	8,128	13,752	0.74
50,498	2,776,186	159	1,455	1.82	631,694	88,281,508	29	16,190	253,682	0.72
135,269	9,307,568	361	2,149	1.45	386,611	40,988,936	138	11,456	24,752	0.94
408,770	19,552,197	1,181	1,380	2.09	494,789	40,622,231	250	13,789	13,541	1.22
320,533	26,543,734	540	4,096	1.21	246,815	25,091,144	50	7,624	41,819	0.98
79,299	7,197,942	376	1,595	1.10	331,553	53,187,295	87	10,790	50,946	0.62
198,311	13,879,708	783	1,477	1.43	184,053	23,554,467	106	7,115	18,518	0.78
186,222	8,537,485	557	1,277	2.18	223,726	20,674,508	94	6,779	18,328	1.08
167,185	12,133,205	725	1,395	1.38	275,736	30,516,019	107	8,936	23,766	0.90
156,862	9,825,956	473	1,731	1.60	250,457	22,707,085	78	7,155	24,260	1.10
176,407	11,500,695	660	1,452	1.53	227,958	20,885,677	147	7,753	11,840	1.09
114,325	8,778,722	622	1,176	1.30	282,400	34,654,072	96	9,503	30,082	0.81
265,543	19,453,062	1,058	1,532	1.37	126,620	11,182,295	121	3,769	7,701	1.13
156,277	12,104,978	652	1,547	1.29	297,285	29,757,784	137	11,673	18,101	1.00

Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
◆ Acton.....	4,204	1,303	83,503	6,893,015	1,206	476	1.21
◆ Ailsa Craig.....	547	224	9,830	729,960	203	300	1.35
◆ Ajax.....	8,013	2,157	132,908	10,295,626	1,976	434	1.29
◆ Alexandria.....	2,529	842	37,039	3,542,435	764	386	1.05
◆ Alfred.....	952	298	11,792	772,758	274	235	1.53
Alliston.....	2,918	1,041	53,543	4,675,730	857	455	1.15
◆ Almonte.....	3,227	1,062	50,037	5,246,196	984	444	0.95
Alvinston.....	648	319	7,300	394,420	249	132	1.85
◆ Amherstburg.....	4,389	1,392	87,435	7,685,182	1,253	511	1.14
Ancaster Twp. (including Ancaster).	13,302	1,121	98,950	7,530,225	1,044	601	1.31
Apple Hill.....	400	126	4,421	268,900	104	215	1.64
◆ Arkona.....	476	199	11,886	841,522	188	373	1.41
◆ Arnprior.....	5,482	1,740	88,248	8,932,689	1,605	464	0.99
◆ Arthur.....	1,215	488	22,080	1,793,260	435	344	1.23
◆ Athens.....	964	348	12,309	1,271,387	332	319	0.97
◆ Atikokan Twp.....	6,906	1,900	152,742	11,842,403	1,762	560	1.29
◆ Aurora.....	5,302	2,231	88,356	9,196,785	2,012	381	0.96
◆ Avonmore (3 months' operation)...	277	115	1,987	118,838	103	385	1.67
◆ Aylmer.....	4,536	1,580	70,893	6,738,032	1,315	427	1.05
Ayr.....	1,019	367	17,707	1,528,568	302	422	1.16
◆ Baden.....	875	282	15,564	1,331,435	264	420	1.17
◆† Bala.....	*474	782	29,191	1,119,024	699	133	2.61
Bancroft.....	2,619	786	47,144	3,193,820	651	409	1.48
Barrie.....	20,899	6,803	386,050	38,195,744	5,914	538	1.01
◆ Barry's Bay.....	1,461	401	12,927	787,474	372	176	1.64
Bath.....	650	245	13,785	955,778	219	364	1.44
◆ Beachville.....	813	290	15,929	1,339,941	281	397	1.19
Beamsville.....	2,356	827	46,417	4,080,877	706	482	1.14
◆† Beardmore.....	1,137	311	18,496	1,067,848	282	(339)	1.73
Beaverton.....	1,156	538	24,107	1,841,425	443	346	1.31
Beeton.....	775	308	15,826	1,071,130	254	351	1.48
◆ Belle River.....	1,919	686	27,714	1,446,550	625	193	1.92
Belleville.....	28,700	9,450	419,000	51,971,446	8,160	531	0.81
◆ Blenheim.....	2,975	1,100	35,748	2,426,785	979	(210)	1.47
◆† Blind River.....	3,898	1,287	83,231	5,155,966	1,185	363	1.61
◆ Bloomfield.....	755	307	11,559	1,229,561	287	357	0.94
◆ Blyth.....	730	326	14,364	1,147,240	288	332	1.25
Bobcaygeon.....	1,180	709	26,163	1,599,710	588	227	1.64
◆ Bolton.....	1,702	650	46,590	3,246,955	612	442	1.43
Bothwell.....	804	321	8,429	632,860	245	215	1.33

For explanation of symbols see page 288

Utilities and Local Systems  
AND CONSUMPTION  
December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
23,846	1,408,980	66	1,779	1.69	100,913	7,539,412	31	2,695	20,267	1.34
3,319	192,668	17	944	1.72	3,752	172,324	4	111	3,590	2.18
32,065	2,045,360	109	1,564	1.57	141,651	12,281,837	72	3,972	14,215	1.15
18,382	1,251,444	60	1,738	1.47	24,324	1,853,870	18	727	8,583	1.31
2,781	149,360	16	778	1.86	6,477	337,700	8	223	3,518	1.92
25,210	1,472,014	155	791	1.71	17,154	1,346,561	29	550	3,869	1.27
11,389	840,409	53	1,321	1.36	30,070	3,345,597	25	1,088	11,152	0.90
6,517	306,574	62	412	2.13	2,115	86,080	8	68	897	2.46
34,106	2,151,941	113	1,587	1.58	57,377	5,236,680	26	1,634	16,784	1.10
17,749	731,106	66	923	2.43	4,517	248,570	11	139	1,883	1.82
1,449	63,760	22	242	2.27						
1,999	139,345	9	1,290	1.43	2,702	163,660	2	67	6,819	1.65
31,545	2,355,437	104	1,887	1.34	55,198	4,953,643	31	1,847	13,316	1.11
7,380	394,405	38	865	1.87	5,673	340,790	15	212	1,893	1.66
2,285	174,170	14	1,037	1.31	869	51,200	2	46	2,133	1.70
50,246	3,152,287	109	2,410	1.59	50,068	5,610,381	29	1,205	16,122	0.89
40,538	3,073,254	178	1,439	1.32	76,825	7,869,806	41	2,468	15,996	0.98
551	30,620	12	851	1.80						
44,318	3,276,906	229	1,192	1.35	80,154	7,339,876	36	2,760	16,990	1.09
8,515	490,313	52	786	1.74	10,590	464,743	13	338	2,979	2.28
2,372	154,265	13	989	1.54	18,177	1,438,560	5	573	23,976	1.26
10,115	445,310	77	482	2.27	958	57,772	6	46	802	1.66
27,788	1,298,000	122	887	2.14	12,527	724,850	13	386	4,646	1.73
198,311	13,879,708	783	1,477	1.43	184,053	23,554,467	106	7,115	18,518	0.78
5,670	343,315	26	1,100	1.65	929	68,980	3	23	1,916	1.35
3,578	147,835	24	513	2.42	824	53,310	2	23	2,221	1.55
1,878	105,493	7	1,256	1.78	102,553	14,105,820	2	1,694	587,743	0.73
18,241	1,067,569	107	831	1.71	10,578	629,875	14	350	3,749	1.68
13,400	598,689	27	(1,073)	2.24	117	900	2	6	38	13.00
12,881	790,180	83	793	1.63	21,918	1,626,746	12	724	11,297	1.35
5,154	203,217	46	368	2.54	6,198	335,190	8	142	3,492	1.85
14,361	747,240	56	1,112	1.92	3,515	230,166	5	96	3,836	1.53
225,193	19,521,918	1,127	1,444	1.15	197,863	26,898,602	163	8,128	13,752	0.74
28,046	1,570,833	96	(1,190)	1.79	24,830	1,513,105	25	797	5,044	1.64
44,025	2,389,686	86	2,316	1.84	18,348	1,230,190	16	428	6,407	1.49
3,123	185,964	15	1,033	1.68	1,064	34,499	5	74	575	3.08
5,311	299,304	31	805	1.77	12,273	1,010,065	7	307	12,025	1.22
14,207	676,711	113	499	2.10	7,307	262,290	8	257	2,732	2.79
7,252	359,388	21	1,426	2.02	5,459	334,001	17	182	1,637	1.63
6,746	452,186	66	571	1.49	5,251	137,960	10	203	1,150	3.81



**Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended**

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (Including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
◆ Bowmanville.....	7,203	2,402	120,172	12,415,987	2,232	464	0.97
Bracebridge.....	2,821	1,173	66,597	4,823,035	942	427	1.38
◆ Bradford.....	2,298	795	43,579	3,795,375	695	455	1.15
Braeside.....	559	159	7,536	462,831	148	261	1.63
◆ Brampton.....	15,241	4,910	261,358	25,973,266	4,577	473	1.01
Brantford.....	53,201	16,738	863,744	76,704,734	14,896	429	1.13
◆ Brantford Twp.....	7,247	2,074	222,614	14,020,431	1,934	604	1.59
◆ Brechin.....	259	95	3,446	295,308	81	304	1.17
◆ Bridgeport.....	1,617	441	29,371	2,397,107	415	481	1.23
◆ Brigen.....	518	221	5,165	340,259	188	151	1.52
◆ Brighton.....	2,260	972	43,728	4,008,161	890	375	1.09
Brockville.....	16,622	5,488	268,052	26,203,666	4,770	458	1.02
Brussels.....	845	386	16,518	1,378,456	299	384	1.20
◆ Burford.....	1,030	414	28,172	2,050,346	373	458	1.37
Burgessville.....	243	99	5,423	432,501	78	462	1.25
◆ Burk's Falls.....	863	333	15,865	1,116,907	291	320	1.42
◆ Burlington.....	42,511	13,086	1,184,640	84,709,993	12,437	568	1.40
◆ Cache Bay.....	845	202	7,961	407,765	195	174	1.95
Caledonia.....	2,197	774	27,472	2,038,985	633	268	1.35
◆ Campbellford (6 months' operation).....	3,393	1,258	29,677	2,908,474	1,137	426	1.02
Campbellville.....	351	88	6,592	486,788	83	489	1.35
Cannington.....	1,056	441	19,923	1,640,594	361	379	1.21
Capreol.....	2,563	952	66,850	4,582,199	855	447	1.46
◆ Cardinal.....	2,047	643	35,021	3,179,341	610	(437)	1.10
◆ Carleton Place.....	4,684	1,669	95,112	7,430,806	1,549	400	1.28
◆ Casselman.....	1,269	370	20,516	1,208,486	349	289	1.70
◆ Cayuga.....	889	374	12,771	927,504	330	234	1.38
◆ Chalk River.....	1,045	270	13,749	1,199,234	251	398	1.15
Chapleau Twp.....	3,773	976	83,735	1,564,946	854	153	5.35
Chatham.....	28,439	9,458	397,560	22,024,564	8,027	229	1.81
◆ Chatsworth.....	394	167	7,828	636,030	146	363	1.23
Chesley.....	1,664	707	30,191	2,649,131	584	378	1.14
Chesterville.....	1,253	440	19,502	1,609,848	353	380	1.21
Chippawa.....	2,744	974	46,946	3,424,013	888	321	1.37
◆ Clifford.....	534	217	12,816	938,999	195	401	1.36
◆ Clinton.....	2,980	1,187	70,195	5,680,755	1,061	(449)	1.24
† Cobalt.....	2,116	691	40,904	2,564,554	572	374	1.59
◆ Cobden.....	876	373	13,282	1,642,053	341	401	0.81
◆ Cobourg.....	9,338	3,286	196,295	16,803,304	2,985	469	1.17
Cochrane.....	4,261	1,300	89,377	6,750,269	1,081	520	1.32

For explanation of symbols see page 288

Utilities and Local Systems  
AND CONSUMPTION  
December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
35,846	2,851,591	132	1,800	1.26	84,544	9,346,226	38	2,897	20,496	0.90
45,624	3,106,838	210	1,233	1.47	13,341	771,043	21	521	3,060	1.73
19,641	1,249,318	72	1,446	1.57	23,429	1,992,225	28	636	5,929	1.18
1,125	50,580	9	468	2.22	31,831	2,425,558	2	946	101,065	1.31
93,393	6,216,030	216	2,398	1.50	134,575	12,344,249	117	4,507	8,792	1.09
345,100	27,524,336	1,545	1,485	1.25	859,553	95,147,804	297	30,566	26,697	0.90
38,939	2,116,480	101	1,746	1.84	93,260	5,969,938	39	2,790	12,756	1.56
2,490	136,332	13	874	1.83	620	26,842	1	26	2,237	2.31
7,415	495,648	20	2,065	1.50	2,817	184,700	6	86	2,565	1.53
4,559	270,410	25	901	1.69	3,944	152,690	8	145	1,591	2.58
15,437	994,803	70	1,184	1.55	7,445	561,219	12	288	3,897	1.33
114,325	8,778,722	622	1,176	1.30	282,400	34,654,072	96	9,503	30,082	0.81
9,424	517,246	78	553	1.82	7,433	419,090	9	178	3,880	1.77
8,313	474,396	34	1,163	1.75	5,419	302,715	7	160	3,604	1.79
2,205	99,954	18	463	2.21	1,729	32,400	3	64	900	5.34
7,258	425,960	38	934	1.70	1,872	88,100	4	68	1,835	2.13
245,132	14,595,294	514	2,366	1.68	302,003	22,849,926	135	7,402	14,105	1.32
552	21,271	4	443	2.60	19,860	911,092	3	462	25,308	2.18
18,237	1,147,499	120	797	1.59	11,938	783,828	21	347	3,110	1.52
11,918	1,104,297	100	1,840	1.08	13,750	1,288,020	21	419	1,143	1.30
1,189	55,655	4	1,159	2.14	577	56,300	1	10	4,692	1.03
7,951	402,222	68	493	1.98	6,161	266,366	12	205	1,850	2.31
12,191	782,985	94	694	1.56	11,565	723,657	3	281	20,102	1.60
5,936	356,245	29	(913)	1.67	1,219	105,620	4	35	2,200	1.15
25,319	1,408,637	93	1,262	1.80	43,232	3,842,328	27	1,300	11,859	1.13
4,168	198,323	14	1,180	2.10	11,440	645,470	7	340	7,684	1.77
7,461	436,868	35	1,040	1.71	4,232	133,500	9	193	1,236	3.17
3,719	297,778	17	1,460	1.25	2,916	269,600	2	92	11,233	1.08
38,143	625,617	105	497	6.10	13,842	430,367	17	154	2,110	3.22
408,770	19,552,197	1,181	1,380	2.09	494,789	40,622,231	250	13,789	13,541	1.22
3,832	223,715	20	932	1.71	990	43,125	1	30	3,594	2.30
14,376	781,417	98	664	1.84	11,269	705,254	25	422	2,351	1.60
9,755	560,123	77	606	1.74	28,540	3,006,871	10	736	25,057	0.95
13,101	675,574	78	722	1.94	2,378	250,270	8	86	2,607	0.95
3,552	205,868	15	1,144	1.73	4,879	287,950	7	116	3,428	1.69
27,942	1,656,962	99	(1,303)	1.69	21,162	1,499,669	27	606	4,629	1.41
24,956	1,013,380	109	775	2.46	8,543	804,133	10	231	6,701	1.06
3,118	239,570	25	799	1.30	3,492	220,539	7	189	2,625	1.58
70,805	5,051,696	235	1,791	1.40	154,974	16,191,278	66	4,565	20,444	0.96
53,571	2,872,200	191	1,253	1.87	21,439	1,767,755	28	572	5,261	1.21

**Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended**

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Colborne.....	1,256	559	26,207	2,149,262	460	389	1.22
Coldwater.....	748	259	12,624	1,047,665	208	420	1.20
Collingwood.....	8,302	3,031	140,118	11,737,997	2,589	378	1.19
◆Comber.....	596	237	7,567	459,710	205	187	1.65
◆Coniston.....	2,568	633	43,539	3,196,982	615	433	1.36
Cookstown.....	673	248	11,862	918,210	210	364	1.29
◆Cottam.....	630	237	8,630	627,200	214	244	1.38
◆Courtright.....	551	194	5,623	437,034	181	201	1.29
Creemore.....	870	358	15,982	1,381,348	301	382	1.16
◆Dashwood.....	413	179	10,843	681,911	169	336	1.59
◆Deep River.....	4,789	1,320	109,712	10,058,721	1,208	694	1.09
Delaware.....	411	136	9,906	686,184	118	485	1.44
◆Delhi.....	3,317	1,307	54,097	4,676,938	1,147	340	1.16
◆Deseronto.....	1,819	633	28,037	2,498,460	589	353	1.12
◆Dorchester.....	865	325	13,878	1,096,622	309	296	1.27
◆Drayton.....	616	259	13,621	874,181	236	309	1.56
◆Dresden.....	2,174	880	29,482	1,825,950	797	191	1.61
◆Drumbo.....	375	166	8,301	677,596	155	(374)	1.23
Dryden.....	5,475	1,642	121,371	9,332,185	1,424	546	1.30
◆Dublin.....	271	110	5,257	450,708	95	395	1.17
◆Dundalk.....	854	414	17,503	1,245,675	365	284	1.41
Dundas.....	12,626	3,455	190,713	15,639,348	3,016	432	1.22
Dunnville.....	5,212	1,903	63,170	3,831,904	1,573	203	1.65
Durham.....	2,075	808	35,698	2,895,324	661	365	1.23
◆Dutton.....	777	346	11,226	786,294	318	206	1.43
◆East York Twp.....	67,262	22,107	1,190,637	115,520,123	21,164	455	1.03
Eganville.....	1,549	559	25,699	1,592,486	459	289	1.61
†Elk Lake Townsite.....	\$475	187	8,179	571,340	136	350	1.43
◆Elmira.....	2,939	1,128	69,051	5,813,196	1,033	469	1.19
◆Elmvale.....	925	379	17,928	1,569,558	340	385	1.14
◆Elmwood.....	\$450	137	4,270	326,480	125	218	1.31
Elora.....	1,479	543	31,294	2,060,144	462	372	1.52
Embro.....	562	228	12,636	1,028,872	180	476	1.23
†Englehart.....	1,650	585	39,938	2,401,961	485	413	1.66
◆Erieau.....	462	334	12,050	900,185	294	255	1.34
◆Erie Beach.....	*132	138	4,563	142,850	132	90	3.19
◆Erin.....	1,005	402	21,001	1,616,559	366	368	1.30
Essex.....	3,442	1,195	42,462	2,893,520	981	246	1.47
Etobicoke Twp. (including Thistleton.....)	134,260	46,512	3,186,882	289,666,350	44,112	547	1.10
Exeter.....	2,888	1,194	69,800	5,241,032	986	443	1.33

For explanation of symbols see page 288

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
13,853	676,742	90	627	2.05	4,558	310,353	9	118	2,874	1.47
6,479	365,203	47	648	1.77	9,477	572,348	4	259	11,924	1.66
76,126	4,738,556	379	1,042	1.61	90,384	8,359,180	63	3,261	11,057	1.08
4,556	239,675	24	832	1.90	6,115	244,282	8	222	2,545	2.50
5,530	275,160	16	1,433	2.01	175	12,580	2	6	524	1.39
3,815	140,445	34	344	2.72	2,516	171,560	4	89	3,574	1.47
2,902	143,090	16	745	2.03	3,627	104,566	7	177	1,245	3.47
1,308	100,645	11	762	1.30	675	72,994	2	18	3,041	0.93
5,732	301,150	52	483	1.90	2,019	90,400	5	89	1,507	2.23
1,209	59,290	6	823	2.04	3,103	107,980	4	117	2,250	2.87
40,671	2,748,253	104	2,202	1.48	6,908	743,843	8	168	7,748	0.93
3,779	158,803	18	735	2.38						
38,336	2,344,717	123	1,589	1.64	37,448	2,469,246	37	1,261	5,561	1.52
5,954	388,698	28	1,157	1.53	14,673	978,840	16	578	5,098	1.50
1,944	104,280	13	668	1.86	2,518	124,560	3	86	3,460	2.02
2,359	106,929	19	469	2.21	2,122	83,280	4	73	1,735	2.55
22,254	1,368,428	59	1,933	1.63	33,395	1,785,934	24	996	6,201	1.87
1,484	78,680	8	(546)	1.89	1,648	44,822	3	70	1,245	3.68
86,040	3,453,419	198	1,453	2.49	7,457	378,370	20	238	1,577	1.97
2,876	189,480	13	1,215	1.52	3,188	132,000	2	78	5,500	2.42
7,707	366,035	37	824	2.11	5,712	279,205	12	216	1,939	2.05
84,394	4,862,102	350	1,158	1.74	86,565	7,153,258	89	3,119	6,698	1.21
59,699	3,146,503	292	898	1.90	91,198	6,983,142	38	2,291	15,314	1.31
19,031	993,295	122	678	1.92	29,524	1,543,000	25	933	5,143	1.91
3,136	146,510	15	814	2.14	6,440	503,862	13	235	3,230	1.28
217,782	15,784,777	736	1,787	1.38	332,732	37,382,603	207	10,569	15,049	0.89
18,248	786,786	88	745	2.32	6,749	418,044	12	186	2,903	1.61
6,282	374,617	46	679	1.68	9,032	282,421	5	278	4,707	3.20
24,557	1,507,393	64	1,963	1.63	76,501	6,543,097	31	2,103	17,589	1.17
6,634	424,246	32	1,105	1.56	1,630	126,790	7	56	1,509	1.29
1,221	76,320	10	636	1.60	2,285	90,400	2	86	3,767	2.53
10,318	458,663	75	510	2.25	7,062	457,460	6	199	6,354	1.54
3,192	221,254	44	419	1.44	4,481	181,670	4	111	3,785	2.47
20,382	767,278	93	688	2.66	9,345	719,570	7	197	8,566	1.30
6,253	375,650	33	949	1.66	7,805	335,535	7	228	3,994	2.33
531	17,170	6	238	3.09						
5,922	345,585	31	929	1.71	1,468	86,530	5	49	1,442	1.70
34,788	2,079,300	182	952	1.67	23,054	1,103,752	32	837	2,874	2.09
831,083	57,489,780	**1,615	2,966	1.45	1,530,075	180,464,023	785	49,295	19,158	0.85
31,341	1,760,007	177	829	1.78	22,384	1,200,218	31	773	3,226	1.86



Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Fergus.....	3,861	1,338	87,274	6,379,657	1,158	459	1.37
◆ Finch.....	411	178	7,447	689,132	164	350	1.08
◆ Flesherton.....	487	248	7,973	835,279	221	315	0.95
Fonthill.....	2,170	750	47,589	3,765,825	665	472	1.26
◆ Forest.....	2,056	871	44,969	4,068,707	805	421	1.11
◆ Forest Hill.....	19,888	7,307	544,583	49,632,760	6,917	.....	1.10
Fort William.....	42,900	13,464	739,932	93,956,809	11,744	667	0.79
◆ Frankford.....	1,560	563	26,323	2,314,503	537	(362)	1.14
Galt.....	26,292	8,615	472,137	39,722,672	7,612	435	1.19
◆ Georgetown.....	9,330	3,224	207,990	15,781,924	3,006	(440)	1.32
◆ Geraldton.....	3,404	1,035	67,133	3,848,991	952	(353)	1.74
◆ Glencoe.....	1,118	487	12,979	1,032,710	423	203	1.26
◆ Goderich.....	6,119	2,391	132,244	10,686,110	2,193	406	1.24
◆† Gogama.....	500	126	8,626	262,342	107	204	3.29
Grand Bend.....	*846	816	37,049	1,800,210	701	214	2.06
Grand Valley.....	651	315	13,871	1,005,990	254	330	1.38
Granton.....	306	122	5,787	344,193	99	290	1.68
◆ Gravenhurst.....	3,133	1,306	53,263	5,815,918	1,175	412	0.92
Grimsby.....	4,725	1,660	70,766	6,117,220	1,405	363	1.16
◆ Guelph.....	37,123	11,733	692,259	62,950,394	10,629	494	1.10
Hagersville.....	2,146	753	26,416	1,987,602	582	285	1.33
† Haileybury.....	2,586	851	52,286	3,979,289	688	482	1.31
Hamilton.....	255,833	76,274	3,845,815	331,314,240	66,846	413	1.16
Hanover.....	4,282	1,582	73,061	6,914,283	1,354	426	1.06
◆ Harriston.....	1,639	660	33,119	2,608,913	597	364	1.27
◆ Harrow.....	1,837	693	39,463	3,254,129	600	452	1.21
Hastings.....	896	435	14,243	959,089	360	222	1.49
◆ Havelock.....	1,288	441	20,389	1,435,983	415	(291)	1.42
◆ Hawkesbury.....	8,483	2,176	118,833	8,265,637	2,046	337	1.44
◆ Hearst.....	2,110	601	50,690	2,756,745	555	414	1.84
Hensall.....	906	357	17,042	1,454,465	275	441	1.17
◆† Hepworth.....	354	125	4,564	255,210	110	232	1.79
Hespeler.....	4,304	1,397	67,807	5,260,538	1,225	358	1.29
Highgate.....	391	164	3,910	260,140	126	172	1.50
Holstein.....	171	94	3,261	257,190	76	282	1.27
† Hornepayne.....	1,400	459	36,312	1,192,627	410	242	3.04
◆† Hudson Townsite.....	500§	207	7,772	367,393	190	(169)	2.12
Huntsville.....	3,241	1,206	61,242	5,374,844	970	462	1.14
† Ignace (7 months' operation).....	710	218	8,983	267,594	185	207	3.36
Ingersoll.....	7,050	2,328	114,121	7,668,272	2,028	315	1.49

For explanation of symbols see page 288

Utilities and Local Systems  
AND CONSUMPTION  
December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Ave- rage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
31,454	1,564,430	150	869	2.01	64,601	5,115,064	30	1,657	14,209	1.26
1,471	85,080	9	788	1.73	1,959	103,479	5	79	1,725	1.89
4,207	292,357	25	975	1.44	1,503	112,040	2	62	4,668	1.34
12,205	650,579	74	733	1.88	3,590	175,795	11	113	1,332	2.04
15,276	996,522	45	1,845	1.53	10,291	926,029	21	355	3,675	1.11
160,696	11,315,000	370	.....	1.42	21,204	1,757,280	20	767	.....	1.21
352,667	34,762,237	1,492	1,942	1.01	486,396	54,997,638	228	20,503	20,101	0.88
3,701	222,261	21	(726)	1.67	1,945	134,231	5	100	2,237	1.45
181,044	10,428,741	797	1,090	1.74	471,496	48,006,315	206	15,587	19,420	0.98
54,383	3,016,360	179	(1,299)	1.80	111,995	11,696,160	39	3,071	24,992	0.96
42,902	1,931,125	69	(1,443)	2.22	2,029	64,529	14	73	384	3.14
12,520	796,798	47	1,413	1.57	8,292	353,667	17	367	1,734	2.34
42,566	2,218,626	137	1,350	1.92	121,251	8,707,352	61	3,318	11,895	1.39
4,073	127,030	17	623	3.21	4,188	225,290	2	58	9,387	1.86
21,969	902,083	115	654	2.44	.....	.....	.....	.....	.....	.....
5,895	274,210	53	431	2.15	4,523	232,313	8	154	2,420	1.95
1,732	60,550	22	229	2.86	200	2,900	1	8	242	6.89
26,141	2,301,416	103	1,862	1.14	30,497	3,037,304	28	1,189	9,040	1.00
46,832	3,033,565	223	1,134	1.54	27,449	2,484,777	32	874	6,471	1.10
267,288	19,355,299	959	1,682	1.38	596,288	69,922,820	145	18,710	40,186	0.85
26,723	1,573,990	147	892	1.70	42,173	2,844,557	24	1,480	9,877	1.48
31,918	1,415,019	142	830	2.26	11,381	823,099	21	374	3,266	1.38
2,098,394	168,270,990	8,037	1,745	1.25	8,646,178	1,303,357,328	1,391	258,332	78,083	0.66
27,368	1,779,087	187	793	1.54	55,331	5,049,125	41	2,060	10,262	1.10
10,676	615,408	49	1,047	1.73	22,889	1,938,980	14	630	11,542	1.18
20,915	1,239,660	81	1,275	1.69	16,785	675,080	12	615	4,688	2.49
8,421	404,583	69	489	2.08	3,596	152,288	6	113	2,115	2.36
7,068	419,813	23	(1,296)	1.68	1,605	138,283	3	62	3,841	1.16
55,786	3,119,852	102	2,549	1.79	11,476	776,464	28	368	2,311	1.48
27,066	1,314,393	37	2,960	2.06	4,530	215,835	9	73	1,998	2.10
9,176	514,460	61	703	1.78	16,554	969,350	21	526	3,847	1.71
2,702	116,092	15	774	2.33	.....	.....	.....	.....	.....	.....
22,007	1,214,892	135	750	1.81	135,831	15,204,165	37	4,288	34,244	0.89
2,895	120,550	32	314	2.40	4,049	162,880	6	113	2,262	2.49
1,033	50,960	17	250	2.03	729	58,400	1	13	4,867	1.25
23,233	616,450	48	1,070	3.77	11,105	917,600	1	151	76,467	1.21
5,513	267,377	13	(1,036)	2.06	4,378	152,600	4	95	3,179	2.87
50,215	3,145,718	208	1,260	1.60	28,389	2,764,466	28	985	8,228	1.03
8,104	221,917	31	1,023	3.65	2,099	81,900	2	58	5,850	2.56
57,609	3,269,744	251	1,086	1.76	134,852	12,316,005	49	4,128	20,946	1.09

Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Iroquois.....	1,010	377	24,152	1,924,767	317	506	1.25
Jarvis.....	741	269	7,218	568,481	210	226	1.27
♦†Jellicoe Townsite.....	\$140	54	2,265	109,520	50	(196)	2.07
♦Kapuskasing.....	6,039	1,977	117,047	9,988,563	1,758	473	1.17
†Kearns Townsite.....	\$500	186	11,101	854,586	171	416	1.30
♦Kemptville.....	1,865	752	35,421	3,354,349	684	409	1.06
♦Kincardine.....	2,701	1,177	48,136	4,527,890	1,064	355	1.06
†King Kirkland Townsite.....	\$500	172	8,257	612,590	149	343	1.35
Kingston.....	47,611	15,137	814,512	88,526,292	12,875	573	0.92
♦Kingsville.....	3,016	1,247	43,136	3,885,210	1,096	295	1.11
Kirkfield.....	126	96	4,438	258,780	75	288	1.72
†Kirkland Lake (including Swastika)	\$18,264	5,673	304,969	21,930,453	4,763	384	1.39
Kitchener.....	69,622	22,229	1,398,760	121,493,197	20,153	502	1.15
Lakefield.....	2,031	713	32,605	3,194,468	599	444	1.02
Lambeth.....	1,794	580	39,717	2,863,144	542	440	1.39
♦Lanark.....	880	323	9,013	835,736	304	229	1.08
♦Lancaster.....	626	196	7,765	688,823	176	(332)	1.13
Larder Lake Twp.....	1,973	567	34,239	2,610,290	511	426	1.31
♦Latchford.....	440	153	4,733	275,076	138	166	1.72
♦Leamington.....	8,453	3,273	128,312	10,376,071	3,008	287	1.24
♦Lindsay.....	10,404	3,695	190,347	17,260,491	3,411	422	1.10
♦Listowel.....	3,613	1,459	75,034	6,436,931	1,313	409	1.17
London.....	100,002	32,319	1,509,821	119,599,178	28,989	344	1.26
♦London Twp.....	40,718	958	62,205	4,744,991	936	422	1.31
Long Branch.....	10,728	4,108	215,433	19,269,500	3,921	410	1.12
♦L'Orignal.....	1,134	343	17,609	900,376	324	232	1.96
♦Lucan.....	930	356	21,624	1,649,688	331	415	1.31
Lucknow.....	1,012	453	15,749	1,356,659	349	324	1.16
♦Lynden.....	538	165	10,434	853,970	158	(484)	1.22
♦Madoc.....	1,469	585	23,387	2,263,214	521	362	1.03
♦Magnetawan.....	253	104	4,449	205,490	95	(190)	2.17
Markdale.....	1,044	421	16,541	1,486,474	330	375	1.11
♦Markham.....	4,213	1,306	89,750	7,695,780	1,202	534	1.17
Marmora.....	1,370	521	24,252	1,876,986	440	355	1.29
♦Martintown.....	430	124	5,800	373,075	102	305	1.55
♦Massey.....	1,270	375	28,399	1,433,832	358	334	1.98
†Matachewan Twp.....	888	237	10,271	732,109	198	308	1.40
†Matheson.....	895	301	17,577	1,500,781	235	532	1.17
♦†Mattawa.....	3,200	770	54,425	2,727,539	660	344	2.00
♦Maxville.....	821	314	12,413	1,039,769	283	306	1.19

For explanation of symbols see page 288

Utilities and Local Systems  
AND CONSUMPTION  
December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
14,305	824,097	53	1,296	1.74	5,459	420,026	7	160	5,000	1.30
4,936	312,909	51	511	1.58	5,091	243,780	8	172	2,539	2.09
1,941	88,728	3	(1,138)	2.19	841	37,500	1	17	3,125	2.24
64,077	3,873,842	187	1,726	1.65	7,738	402,839	32	370	1,049	1.92
3,361	153,168	14	912	2.19	699	30,502	1	15	2,542	2.29
12,926	852,440	51	1,393	1.52	25,719	1,927,756	17	852	9,450	1.33
20,056	1,202,382	90	1,113	1.67	38,234	3,082,721	23	1,100	11,169	1.24
4,706	227,463	23	824	2.07	407,825	42,487,024	235	13,213	15,066	0.96
652,458	54,360,575	2,027	2,235	1.20	25,943	1,684,627	34	972	4,129	1.54
26,444	1,672,902	117	1,192	1.58						
1,878	48,027	21	191	3.91						
164,781	11,301,020	796	1,183	1.46	64,708	4,951,141	114	1,760	3,619	1.31
659,507	41,843,081	1,711	2,038	1.58	1,381,991	136,007,409	365	38,833	31,052	1.02
17,825	1,143,871	101	944	1.56	7,122	377,742	13	314	2,421	1.89
6,512	273,154	36	632	2.38	1,332	35,965	2	32	1,499	3.70
1,829	124,740	17	611	1.47	1,902	183,880	2	57	7,662	1.03
4,322	325,143	20	(1,178)	1.33						
10,870	606,175	53	953	1.79	1,677	174,610	3	31	4,850	0.96
2,280	149,988	14	893	1.52	1,231	38,133	1	66	3,178	3.23
67,825	4,345,770	186	1,947	1.56	124,030	12,014,702	79	3,411	12,674	1.03
78,855	5,099,273	195	2,179	1.55	132,891	15,127,468	89	3,970	14,164	0.88
33,708	2,063,907	111	1,549	1.63	41,518	2,851,181	35	1,341	6,789	1.46
947,995	70,579,939	2,899	2,029	1.34	1,285,123	152,077,063	431	41,925	29,404	0.85
6,103	363,577	17	1,782	1.68	9,175	891,553	5	239	14,859	1.03
54,360	3,678,582	**141	2,174	1.48	78,442	7,320,243	46	2,590	13,261	1.07
4,346	273,939	16	1,427	1.59	1,346	40,844	3	63	1,135	3.30
5,689	315,588	19	1,384	1.80	2,808	162,070	6	93	2,251	1.73
9,517	541,822	92	491	1.76	11,545	604,370	12	313	4,197	1.91
2,587	142,320	5	(741)	1.82	2,201	54,075	2	97	2,253	4.07
11,832	821,814	54	1,268	1.44	4,670	260,274	10	182	2,169	1.79
1,823	57,366	9	(341)	3.28						
12,513	760,728	84	755	1.64	2,208	125,040	7	80	1,489	1.77
29,476	1,959,527	81	2,016	1.50	16,706	939,909	23	618	3,405	1.78
16,045	849,510	77	919	1.89	2,668	175,620	4	75	3,659	1.52
2,861	111,067	21	441	2.58	788	15,595	1	33	1,300	5.05
4,625	242,805	12	1,686	1.90	1,829	115,320	5	39	1,922	1.59
6,496	287,711	39	615	2.26						
11,595	586,206	62	788	1.98	3,006	203,310	4	70	4,236	1.48
36,029	1,506,532	103	1,219	2.39	22,808	1,045,010	7	464	12,441	2.18
5,516	303,350	27	936	1.82	3,714	130,350	4	125	2,716	2.85



Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
McGarry.....	2,969	481	35,632	2,872,471	429	558	1.24
Meaford.....	3,660	1,499	65,953	5,814,526	1,270	382	1.13
Merlin.....	537	250	7,181	523,199	184	237	1.37
◆Merrickville.....	885	367	14,935	1,109,240	341	(283)	1.35
Merritton.....	6,236	1,920	101,740	7,969,166	1,732	383	1.28
◆Midland.....	8,394	2,810	125,082	13,916,031	2,608	445	0.90
Mildmay.....	847	314	12,582	1,152,538	240	400	1.09
◆Millbrook.....	842	331	16,415	1,271,885	316	(340)	1.29
◆Milton.....	5,148	1,659	110,750	9,018,689	1,501	501	1.23
◆Milverton.....	1,083	468	25,112	1,654,380	406	(343)	1.52
◆Mimico.....	15,516	6,063	273,613	28,430,710	5,830	406	0.96
◆Mitchell.....	2,147	891	50,318	3,835,925	799	400	1.31
◆Moorefield.....	318	128	4,733	404,440	112	301	1.17
◆Morrisburg.....	1,905	743	37,907	3,440,959	660	(460)	1.10
◆Mount Brydges.....	902	355	12,878	812,279	330	205	1.59
◆Mount Forest.....	2,514	974	48,330	4,273,880	878	406	1.13
◆Napanee.....	4,480	1,670	84,477	8,080,513	1,503	448	1.05
◆Neustadt.....	492	204	6,249	632,520	186	283	0.99
◆Newboro.....	296	140	5,192	258,366	129	(174)	2.01
Newburgh.....	557	185	9,924	631,236	157	335	1.57
Newbury.....	335	131	4,656	291,020	109	222	1.60
Newcastle.....	1,132	460	19,313	1,751,266	379	385	1.10
◆New Hamburg.....	2,063	686	39,677	3,311,905	626	(449)	1.20
◆†New Liskeard.....	4,616	1,554	103,134	7,900,602	1,386	475	1.31
Newmarket.....	7,739	2,629	149,663	14,048,270	2,269	516	1.07
◆New Toronto.....	11,532	3,988	214,496	19,599,006	3,688	443	1.09
Niagara.....	2,658	1,060	67,007	5,655,326	922	511	1.18
◆Niagara Falls.....	23,660	7,513	379,184	30,107,379	6,923	362	1.26
◆Nipigon Twp.....	2,633	725	36,567	3,680,713	651	(480)	0.99
North Bay.....	22,684	7,294	439,253	37,727,558	6,115	514	1.16
North York Twp.....	224,959	74,924	4,809,050	446,522,972	68,461	544	1.08
Norwich.....	1,706	682	35,845	2,724,889	566	401	1.32
◆Norwood.....	1,077	408	18,551	1,466,602	357	(371)	1.26
Oakville.....	10,147	3,552	189,294	14,300,330	2,875	415	1.32
◆Oil Springs.....	483	223	6,517	445,241	175	212	1.46
Omeme.....	838	305	13,372	1,060,004	259	341	1.26
◆Orangeville.....	4,610	1,652	103,165	8,395,928	1,493	469	1.23
Orillia.....	14,282	5,334	247,401	25,239,717	4,545	463	0.98
◆Orono.....	859	347	17,565	1,344,369	325	(350)	1.31
◆Oshawa.....	57,683	18,541	907,640	106,603,761	16,785	529	0.85

For explanation of symbols see page 288

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
13,262	714,825	49	1,216	1.86	1,713	83,250	3	37	2,313	2.06
30,426	2,033,501	196	865	1.50	39,270	2,890,280	33	1,141	7,299	1.36
7,786	446,181	62	600	1.75	2,716	89,615	4	79	1,867	3.03
3,674	202,640	19	(512)	1.81	3,869	319,940	7	148	3,809	1.21
50,498	2,776,186	159	1,455	1.82	631,694	88,281,508	29	16,190	253,682	0.72
45,693	3,816,490	141	2,256	1.20	130,834	13,893,738	61	6,116	18,981	0.94
6,429	365,603	66	462	1.76	4,252	274,504	8	133	2,859	1.55
4,096	186,004	13	(912)	2.20	695	36,900	2	18	1,538	1.88
30,557	1,794,622	124	1,206	1.70	96,305	7,990,233	34	2,503	19,584	1.21
11,673	548,557	46	(914)	2.13	12,777	645,822	16	430	3,364	1.98
86,819	6,509,540	195	2,782	1.33	60,124	5,012,447	38	1,997	10,992	1.20
15,908	869,367	67	1,081	1.83	28,708	2,197,144	25	857	7,324	1.31
2,651	159,790	14	951	1.66	1,589	67,720	2	51	2,822	2.35
22,801	1,364,969	69	(1,083)	1.67	9,386	602,149	14	335	3,584	1.56
3,645	162,570	22	616	2.24	3,480	183,980	3	130	5,111	1.89
20,372	1,280,010	69	1,546	1.59	16,051	1,040,840	27	548	3,212	1.54
42,539	3,161,647	137	1,923	1.35	33,858	3,026,715	30	1,253	8,408	1.12
1,366	80,620	16	420	1.69	1,970	152,120	2	82	6,338	1.29
1,574	61,895	11	(322)	2.54						
3,643	143,990	24	500	2.53	3,268	159,000	4	97	3,313	2.06
1,459	78,966	21	313	1.85	264	4,950	1	13	413	5.33
12,959	792,288	71	930	1.64	10,277	838,637	10	282	6,989	1.23
12,819	715,554	42	(1,104)	1.79	20,045	1,306,444	18	581	6,048	1.53
53,025	3,058,530	132	1,931	1.73	50,621	3,527,736	36	1,281	8,166	1.43
99,180	6,397,086	305	1,748	1.55	65,427	5,247,072	55	2,125	7,950	1.25
93,468	6,950,289	212	2,732	1.34	943,456	126,039,937	88	26,808	119,356	0.75
24,095	1,372,480	124	922	1.76	5,941	336,633	14	198	2,004	1.76
320,533	26,543,734	540	4,096	1.21	246,815	25,091,144	50	7,624	41,819	0.98
22,504	1,907,001	64	(2,091)	1.18	12,433	1,575,178	10	380	13,126	0.79
265,543	19,453,062	1,058	1,532	1.37	126,620	11,182,295	121	3,769	7,701	1.13
2,039,205	130,922,471	5,423	2,012	1.56	1,477,129	144,690,750	1,040	48,315	11,594	1.02
15,897	757,429	104	607	2.10	6,130	271,805	12	207	1,888	2.26
9,116	415,393	46	(468)	2.19	4,979	200,135	5	168	3,336	2.49
161,586	8,608,959	566	1,268	1.88	191,680	21,061,568	111	5,924	15,812	0.91
1,455	64,391	14	383	2.26	7,090	663,331	34	160	1,626	1.07
4,831	201,443	41	409	2.40	3,734	256,150	5	85	4,269	1.46
34,541	2,200,817	117	1,568	1.57	23,718	1,571,902	42	1,074	3,119	1.51
156,277	12,104,978	652	1,547	1.29	297,285	29,757,784	137	11,673	18,101	1.00
5,072	300,288	19	(1,065)	1.69	2,801	149,404	3	92	4,150	1.87
369,918	30,893,100	1,498	1,719	1.20	1,241,479	156,528,501	258	39,778	50,558	0.79

Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
◆Ottawa (including Eastview and Rockcliffe Park).....	272,252	84,416	4,159,324	545,137,135	73,730	616	0.76
Otterville.....	729	285	12,784	1,082,200	230	392	1.18
◆Owen Sound.....	17,549	6,081	323,000	29,985,717	5,652	442	1.08
Paisley.....	768	324	13,412	1,026,120	252	339	1.31
Palmerston.....	1,577	616	29,334	2,728,607	502	453	1.08
Paris.....	5,759	1,952	97,646	7,401,164	1,693	364	1.32
◆Parkhill.....	1,115	497	25,344	1,874,338	443	353	1.35
Parry Sound.....	6,070	1,949	99,349	8,517,246	1,647	431	1.17
◆Penetanguishene.....	4,692	1,389	57,406	5,858,982	1,282	381	0.98
◆Perth.....	5,579	1,962	86,783	8,641,803	1,777	(408)	1.00
Peterborough.....	45,248	14,487	885,395	81,092,002	12,826	527	1.09
◆Petrolia.....	3,649	1,287	44,979	2,764,477	1,082	213	1.63
◆Pickering.....	1,754	485	39,790	2,665,390	452	491	1.49
◆†Pickle Lake Landing Townsite.....	§175	97	5,279	282,228	93	(283)	1.87
◆Picton.....	5,072	1,922	99,014	9,001,536	1,586	473	1.10
◆Plattsville.....	477	190	10,225	911,751	177	429	1.12
◆Point Edward.....	2,688	808	27,141	2,355,314	734	267	1.15
Port Arthur.....	41,761	13,344	703,373	83,730,590	11,699	596	0.84
◆Port Burwell.....	722	450	17,372	623,372	423	123	2.79
◆†Port Carling.....	*487	505	24,030	1,173,342	442	221	2.05
Port Colborne.....	14,936	4,672	182,912	13,569,477	4,074	278	1.35
Port Credit.....	6,445	2,670	144,779	12,901,565	2,324	463	1.12
◆Port Dalhousie.....	3,337	1,084	81,753	6,265,009	1,021	511	1.30
Port Dover.....	3,080	1,525	45,271	3,232,085	1,295	208	1.40
Port Elgin.....	1,692	1,038	44,128	2,924,102	856	285	1.51
◆Port Hope.....	7,850	2,780	173,056	14,796,362	2,590	476	1.17
◆Port McNicoll.....	1,010	473	16,879	1,332,308	461	241	1.27
◆Port Perry.....	2,210	829	41,399	3,953,600	781	422	1.05
◆Port Rowan.....	809	328	9,626	637,370	297	179	1.51
◆Port Stanley.....	*1,530	1,144	51,223	3,403,256	1,085	261	1.51
◆†Powassan.....	1,036	333	24,537	1,678,953	312	448	1.46
◆Prescott.....	5,351	1,718	85,229	9,194,427	1,597	480	0.93
◆Preston.....	10,953	3,115	197,749	15,627,264	2,862	(473)	1.27
◆Priceville.....	158	65	2,464	109,604	58	157	2.25
Princeton.....	439	169	8,159	701,117	131	446	1.16
Queenston.....	448	166	11,293	992,634	150	551	1.14
◆†Rainy River.....	1,283	452	39,574	1,293,100	419	257	3.06
◆†Red Lake Townsite.....	2,169	1,012	61,403	3,433,587	964	(320)	1.79
◆Red Rock.....	1,614	325	23,013	2,421,457	303	(673)	0.95
◆Renfrew.....	8,406	2,665	151,098	12,179,017	2,415	(438)	1.24

For explanation of symbols see page 288

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
4,513,479	377,827,799	10,482	3,004	1.19	523,646	48,164,749	204	17,646	19,675	1.09
4,783	251,406	47	446	1.90	2,405	93,485	8	81	974	2.57
121,622	8,974,591	298	2,510	1.36	140,130	11,813,797	131	5,656	7,515	1.19
7,389	377,500	64	492	1.96	3,363	206,236	8	96	2,148	1.63
13,710	846,500	96	735	1.62	11,990	938,150	18	498	4,343	1.28
31,117	2,121,373	221	800	1.47	54,148	4,542,979	38	2,126	9,963	1.19
12,103	621,844	41	1,264	1.95	10,151	518,935	13	326	3,327	1.96
57,433	3,187,000	278	955	1.80	16,222	1,322,799	24	569	4,593	1.23
20,130	1,693,354	85	1,660	1.19	36,978	4,075,751	22	1,309	15,438	0.91
34,487	2,755,032	131	(1,583)	1.25	39,847	3,713,058	54	1,707	5,730	1.07
426,950	27,396,150	1,413	1,616	1.56	570,576	70,484,118	248	19,364	23,684	0.81
29,927	1,450,632	169	715	2.06	32,619	1,657,769	36	833	3,837	1.97
7,671	543,418	30	1,509	1.41	4,429	348,560	3	144	9,682	1.27
1,851	76,008	3	(487)	2.43	76	2,260	1	3	188	3.35
55,495	3,739,176	293	1,063	1.48	19,294	1,923,084	43	851	3,727	1.00
1,657	75,250	11	570	2.20	16,531	1,554,774	2	420	64,782	1.06
12,111	832,070	51	1,360	1.46	131,941	13,537,072	23	4,049	49,047	0.97
363,943	33,127,819	1,475	1,872	1.10	591,618	67,322,210	170	25,042	33,001	0.88
4,067	182,930	23	663	2.22	727	9,000	4	50	188	8.07
14,002	576,485	57	843	2.43	1,376	88,680	6	47	1,232	1.55
106,802	5,877,512	520	942	1.82	82,926	7,375,425	78	2,663	7,880	1.12
75,874	4,611,634	294	1,307	1.65	310,493	44,795,322	52	6,972	71,787	0.69
9,828	607,507	46	1,101	1.62	10,527	591,860	17	306	2,901	1.78
26,252	1,639,606	194	704	1.60	44,108	3,977,185	36	1,390	9,206	1.11
23,787	1,119,600	167	559	2.12	12,349	667,116	15	334	3,706	1.85
51,764	3,496,377	140	2,081	1.48	170,787	18,709,104	50	4,671	31,182	0.91
1,583	73,780	9	683	2.15	28,443	1,497,440	3	879	41,596	1.90
9,554	686,661	36	1,589	1.39	4,725	354,973	12	190	2,465	1.33
4,993	317,730	26	1,018	1.57	819	28,550	5	35	476	2.87
11,271	626,199	42	1,242	1.80	8,312	345,730	17	364	1,695	2.40
8,151	386,435	15	2,147	2.11	1,158	40,558	6	33	563	2.85
26,447	1,867,044	83	1,875	1.42	41,378	3,597,323	38	1,554	7,889	1.15
56,898	3,144,337	148	(1,020)	1.81	235,216	18,952,439	105	7,593	15,042	1.24
816	37,080	7	441	2.20	.....	.....	.....	.....	.....	.....
2,909	149,222	35	355	1.95	1,513	63,015	3	55	1,750	2.40
6,006	363,146	16	1,891	1.65	.....	.....	.....	.....	.....	.....
12,472	397,520	25	1,325	3.14	4,102	240,165	8	92	2,502	1.71
40,149	1,818,419	38	(1,390)	2.21	9,735	388,550	10	218	3,238	2.51
15,130	1,070,116	20	(3,877)	1.41	1,849	209,220	2	60	8,718	0.88
56,083	3,958,376	185	(1,153)	1.42	79,886	6,796,453	65	2,925	8,713	1.18



**Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended**

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Ave- rage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
◆ Richmond.....	1,030	309	18,362	1,502,180	298	420	1.22
◆ Richmond Hill.....	15,032	4,628	335,179	25,544,309	4,415	482	1.31
Ridgetown.....	2,546	1,028	30,503	2,100,378	830	211	1.45
◆ Ripley.....	450	218	10,777	806,456	197	341	1.34
◆ Riverside.....	16,716	5,212	269,804	18,950,841	5,073	311	1.42
◆ Rockland.....	2,880	694	34,453	2,825,149	660	357	1.22
◆ Rockwood.....	868	299	17,054	1,334,579	279	399	1.28
Rodney.....	1,025	442	11,816	936,174	347	225	1.26
◆ Rosseau.....	212	117	4,203	221,978	104	178	1.89
◆ Russell.....	562	203	8,803	858,947	186	385	1.02
St. Catharines.....	41,211	13,980	760,630	56,753,818	12,120	390	1.34
◆ St. Clair Beach.....	1,371	422	29,367	1,883,065	405	387	1.56
◆ St. George.....	711	286	9,529	972,231	258	(316)	0.98
St. Jacobs.....	722	227	11,890	988,686	177	465	1.20
◆ St. Mary's.....	4,349	1,622	98,083	8,113,789	1,481	457	1.21
St. Thomas.....	19,617	7,003	357,504	28,648,810	6,171	387	1.25
◆ Sandwich East Twp.....	21,347	6,342	360,674	16,179,348	6,099	221	2.23
◆ Sandwich West Twp.....	26,297	7,627	540,154	29,610,107	7,261	340	1.82
◆ Sarnia.....	47,119	14,905	676,689	53,918,775	13,948	322	1.26
◆ Scarborough Twp.....	184,654	60,872	4,002,121	327,945,558	58,416	.....	1.22
◆ Schreiber Twp.....	2,104	634	34,123	3,956,885	595	554	0.86
◆ Seaforth.....	2,228	867	40,188	3,677,530	774	396	1.09
Shelburne.....	1,257	564	26,617	1,925,479	444	361	1.38
Simcoe.....	8,418	3,129	111,702	9,572,374	2,551	313	1.17
Sioux Lookout.....	2,613	929	68,144	4,630,900	787	490	1.47
Smith's Falls.....	9,032	3,365	161,681	15,889,757	2,810	471	1.02
Smithville.....	835	374	12,652	872,657	276	263	1.45
Southampton.....	1,742	1,108	37,171	2,692,308	970	231	1.38
†South Porcupine Townsite.....	\$5,600	1,835	86,754	5,968,292	1,557	319	1.45
Springfield.....	524	179	7,850	647,600	151	357	1.21
Stamford Twp.....	29,077	8,798	555,521	43,875,596	8,147	449	1.27
Stayner.....	1,584	622	31,375	2,390,570	504	395	1.31
◆ Stirling.....	1,312	518	25,577	2,222,044	470	(398)	1.15
◆ Stoney Creek.....	5,974	1,861	131,622	11,803,354	1,767	557	1.12
Stouffville.....	2,874	1,062	59,439	5,130,448	921	464	1.16
Stratford.....	20,189	6,937	420,948	36,265,548	6,130	493	1.16
Strathroy.....	4,833	1,756	81,883	7,736,836	1,473	438	1.06
Streetsville.....	4,823	1,425	94,664	6,841,731	1,270	449	1.38
◆ Sturgeon Falls.....	6,281	1,579	91,584	6,610,624	1,472	374	1.39
Sudbury.....	76,782	15,877	974,275	82,564,296	14,045	490	1.18

For explanation of symbols see page 288

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Average cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers monthly loads billed	Monthly consumption per customer	Average cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
6,285	366,810	11	2,779	1.71	396	21,900	8	8	1.81	
73,293	4,592,367	163	2,348	1.60	75,166	6,200,290	50	2,039	10,334	1.21
24,944	1,371,446	166	688	1.82	27,432	1,579,395	32	858	4,113	1.74
2,943	168,130	18	778	1.75	2,087	97,375	3	74	2,705	2.14
36,915	2,400,316	110	1,818	1.54	34,920	2,024,552	29	1,231	5,818	1.72
7,928	467,468	31	1,257	1.70	1,627	161,990	3	65	4,500	1.00
3,726	222,510	19	976	1.67	1,528	71,250	1	43	5,938	2.14
7,353	442,443	84	439	1.66	6,995	278,381	11	249	2,109	2.51
1,885	98,020	13	628	1.92						
2,067	124,781	14	743	1.66	810	42,420	3	43	1,178	1.91
454,770	27,015,134	1,601	1,406	1.68	1,066,893	109,783,171	259	31,277	35,323	0.97
4,820	256,890	10	2,141	1.88	2,091	78,465	7	89	934	2.66
4,852	376,327	21	(1,364)	1.29	6,149	422,031	7	212	5,024	1.46
7,499	381,324	41	775	1.97	5,595	222,597	9	221	2,061	2.51
23,472	1,443,721	93	1,294	1.63	368,116	55,301,192	48	9,055	96,009	0.67
167,185	12,133,205	725	1,395	1.38	275,736	30,516,019	107	8,936	23,766	0.90
70,824	3,225,135	181	1,485	2.20	120,481	5,940,356	62	2,695	7,984	2.03
151,889	8,199,732	300	2,278	1.85	105,686	6,630,772	66	2,383	8,372	1.59
321,877	22,750,072	788	2,406	1.41	4,148,207	715,448,699	169	95,156	352,785	0.58
1,159,418	81,427,999	2,160	.....	1.42	1,425,594	144,705,405	296	40,850	.....	0.99
10,403	892,260	36	2,065	1.17	3,859	491,360	3	121	13,649	0.79
19,357	1,212,206	74	1,365	1.60	18,281	1,441,062	19	597	6,320	1.27
15,892	859,360	108	663	1.85	6,826	364,560	12	251	2,532	1.87
105,676	7,301,332	481	1,265	1.45	160,635	16,174,158	97	5,146	13,895	0.99
34,514	1,347,409	124	906	2.56	14,227	1,244,626	18	306	5,762	1.14
83,929	6,442,665	497	1,080	1.30	64,839	6,000,183	58	2,445	8,621	1.08
10,333	496,558	84	493	2.08	13,357	652,714	14	423	3,885	2.05
17,590	848,145	124	570	2.07	16,548	1,029,480	14	464	6,128	1.61
37,135	2,138,244	238	749	1.74	8,672	620,930	40	304	1,294	1.40
2,787	150,420	25	501	1.85	2,260	58,300	3	95	1,619	3.88
186,222	8,537,485	557	1,277	2.18	223,726	20,674,508	94	6,779	18,328	1.08
14,946	745,115	102	609	2.01	7,472	445,020	16	255	2,318	1.68
8,169	463,138	33	(1,016)	1.76	5,388	373,588	15	212	2,075	1.44
30,928	2,281,527	75	2,535	1.36	13,081	1,229,078	19	406	5,391	1.06
26,130	1,501,001	126	993	1.74	10,929	543,442	15	324	3,019	2.01
176,407	11,500,695	660	1,452	1.53	227,958	20,885,677	147	7,753	11,840	1.09
42,829	2,864,999	231	1,034	1.49	53,728	3,994,596	52	1,966	6,402	1.35
28,018	1,551,636	128	1,010	1.81	35,825	3,276,789	27	1,019	10,114	1.09
35,985	2,139,620	90	1,981	1.68	4,789	367,377	17	179	1,801	1.30
518,974	30,149,474	1,629	1,542	1.72	176,654	13,980,040	203	5,202	5,739	1.26

**Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended**

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Sunderland.....	573	258	11,869	954,027	209	380	1.24
◆Sundridge.....	765	297	12,561	792,004	232	284	1.59
Sutton.....	1,405	884	32,974	2,998,600	721	347	1,10
◆Swansea.....	9,221	3,507	178,493	18,009,790	3,348	448	0.99
◆Tara.....	477	234	9,119	750,620	212	295	1.21
Tavistock.....	1,204	502	26,781	2,260,405	391	482	1.18
◆Tecumseh.....	4,359	1,319	58,216	3,601,481	1,258	239	1.62
◆Teeswater.....	877	359	14,807	1,265,172	323	326	1.17
◆Terrace Bay.....	1,862	416	33,817	4,507,529	389	966	0.75
◆Thamesford.....	878	348	22,618	1,624,363	329	411	1.39
◆Thamesville.....	1,015	448	14,346	991,090	395	209	1.45
◆Thedford.....	733	299	12,039	1,034,170	270	319	1.16
◆Thessalon.....	1,741	539	30,386	1,670,255	445	313	1.82
Thornbury.....	1,129	526	22,594	1,445,234	420	287	1.56
◆Thorndale.....	410	135	9,162	605,190	128	394	1.51
†Thornloe.....	189	36	1,844	113,089	24	393	1.63
Thornton.....	295	103	4,997	364,100	92	330	1.37
Thorold.....	8,483	2,529	126,451	9,933,804	2,255	367	1.27
◆Tilbury.....	3,011	1,009	35,674	2,230,917	900	207	1.60
◆Tillsonburg.....	6,471	2,424	101,877	7,990,884	2,130	313	1.27
†Timmins (including Schumacher)...	\$31,342	9,442	536,668	40,106,915	8,134	411	1.34
Toronto (including Leaside).....	665,382	205,205	11,650,639	934,446,700	171,270	455	1.25
◆Toronto Twp.....	57,179	15,525	997,781	93,339,144	14,306	544	1.07
Tottenham.....	754	275	13,439	1,135,658	214	442	1.18
◆Trafalgar Twp.....	28,624	6,938	587,443	47,092,740	6,748	582	1.25
Trenton.....	12,095	3,978	178,158	22,095,508	3,515	524	0.81
◆Tweed.....	1,688	613	23,091	2,716,457	550	412	0.85
◆Uxbridge.....	2,311	863	42,129	3,971,677	781	424	1.06
◆Vankleek Hill.....	1,675	533	24,144	1,347,237	487	(239)	1.79
Victoria Harbour.....	1,030	487	18,146	1,027,045	446	192	1.77
◆Walkerton.....	3,811	1,272	60,193	5,273,970	1,162	378	1.14
◆Wallaceburg.....	8,050	2,638	88,078	6,584,635	2,341	234	1.34
Wardsville.....	336	143	4,828	356,861	113	263	1.35
◆Warkworth.....	540	232	10,469	819,810	226	(308)	1.28
◆Wasaga Beach.....	*406	1,010	27,026	1,035,495	799	108	2.61
Waterdown.....	1,794	584	39,393	3,230,815	495	544	1.22
◆Waterford.....	2,105	752	38,523	2,609,339	717	303	1.48
Waterloo.....	19,441	6,000	377,490	36,503,360	5,449	558	1.03
Watford.....	1,239	522	24,487	1,926,067	410	391	1.27
Waubashene.....	\$1,300	433	13,995	811,763	399	170	1.72

For explanation of symbols see page 288

## Utilities and Local Systems

## AND CONSUMPTION

December 31, 1959

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
5,372	222,465	45	412	2.41	4,519	206,867	4	101	4,310	2.18
8,593	404,200	62	543	2.13	1,236	52,140	3	40	1,448	2.37
19,977	1,185,562	152	650	1.69	5,055	248,007	11	169	1,879	2.04
54,686	4,230,320	136	2,592	1.29	59,838	7,485,047	23	1,843	27,120	0.80
2,789	162,864	17	798	1.71	5,385	388,610	5	152	6,477	1.39
11,049	540,316	102	441	2.04	9,555	443,467	9	302	4,106	2.15
12,136	731,198	45	1,354	1.66	8,870	616,938	16	284	3,213	1.44
5,081	298,685	29	858	1.70	11,406	938,310	7	333	11,170	1.22
13,981	1,206,280	25	4,021	1.16	5,646	598,000	2	163	24,917	0.94
9,427	659,983	15	3,667	1.43	3,804	180,095	4	101	3,752	2.11
7,707	489,010	38	1,072	1.58	15,428	778,660	15	579	4,326	1.98
3,995	247,570	24	860	1.61	3,134	332,990	5	84	5,550	0.94
19,211	880,909	87	844	2.18	3,017	218,808	7	93	2,605	1.38
11,291	491,930	87	471	2.30	12,871	874,970	19	492	3,838	1.47
978	42,040	4	876	2.33	2,307	82,432	3	64	2,290	2.80
1,244	50,395	12	350	2.47	.....	.....	.....	.....	.....	.....
1,247	49,150	11	372	2.54	.....	.....	.....	.....	.....	.....
47,134	2,758,580	233	987	1.71	343,322	51,424,286	41	9,051	104,521	0.67
24,817	1,468,229	83	1,474	1.69	18,635	822,225	26	722	2,635	2.27
81,772	5,514,577	243	1,891	1.48	59,986	4,962,078	51	1,901	8,108	1.21
250,205	15,726,547	1,168	1,122	1.59	56,987	2,820,579	140	1,397	1,679	2.02
9,079,047	619,237,710	27,137	1,902	1.47	14,676,497	1,478,649,419	6,798	393,313	18,126	0.99
314,425	22,763,781	1,072	1,770	1.38	1,347,846	177,154,375	147	32,939	100,428	0.76
5,123	249,965	54	386	2.05	2,463	160,262	7	65	1,908	1.54
62,536	3,165,620	121	2,180	1.98	485,047	57,103,029	69	9,999	68,965	0.85
79,299	7,197,942	376	1,595	1.10	331,553	53,187,295	87	10,790	50,946	0.62
9,111	761,565	47	1,350	1.20	6,447	657,578	16	291	3,425	0.98
14,534	904,882	60	1,257	1.61	21,445	1,097,988	22	768	4,159	1.95
11,528	466,105	35	(733)	2.47	5,009	129,892	11	216	984	3.86
4,046	167,484	40	349	2.42	344	32,400	1	6	2,700	1.06
27,103	1,736,511	91	1,590	1.56	27,979	2,279,253	19	911	9,997	1.23
61,088	4,171,799	205	1,696	1.46	281,710	31,262,082	92	7,564	28,317	0.90
5,285	280,578	30	779	1.88	.....	.....	.....	.....	.....	.....
1,796	112,729	6	(939)	1.59	.....	.....	.....	.....	.....	.....
24,323	1,057,869	210	420	2.30	381	12,000	1	14	1,000	3.18
12,010	647,510	72	749	1.85	4,312	274,680	17	156	1,346	1.57
8,580	449,840	24	1,562	1.91	10,998	553,455	11	368	4,193	1.99
156,862	9,825,956	473	1,731	1.60	250,457	22,707,085	78	7,155	24,260	1.10
15,021	764,891	100	637	1.96	24,823	1,818,172	12	714	12,626	1.37
3,452	158,480	31	426	2.18	2,746	107,300	3	68	2,981	2.56



**Municipal Electrical  
CUSTOMERS, REVENUE,  
for the Year Ended**

Municipality	Popula- tion	Total customers	DOMESTIC SERVICE (including flat-rate water-heaters)				
			Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh
	No.	No.	\$	kwh	No.	kwh	¢
Webbwood.....	590	146	10,090	348,884	121	240	2.89
Welland.....	17,367	5,380	186,268	15,070,215	4,615	272	1.24
Wellesley.....	655	275	13,572	960,502	215	372	1.41
◆Wellington.....	1,012	534	16,284	1,681,908	494	284	0.97
◆West Ferris Twp.....	4,682	1,744	117,922	7,702,456	1,613	(403)	1.53
◆West Lorne.....	1,116	424	17,359	1,130,448	378	249	1.54
Weston.....	9,254	3,254	185,103	17,129,077	2,832	504	1.08
◆Westport.....	680	288	11,104	1,025,170	260	(332)	1.08
Wheatley.....	1,320	486	18,201	1,191,871	391	254	1.53
◆Whitby.....	11,943	3,681	206,115	17,585,284	3,312	(451)	1.17
◆†White River.....	727	204	19,282	682,296	190	299	2.83
◆Warton.....	1,968	776	32,970	3,178,469	697	380	1.04
Williamsburg.....	356	145	4,400	493,723	106	388	0.89
Winchester.....	1,348	550	23,994	1,920,309	444	360	1.25
◆Windermere.....	*127	120	4,510	250,520	108	193	1.80
◆Windsor.....	117,712	37,050	1,413,068	125,847,059	34,236	306	1.12
◆Wingham.....	2,715	1,032	51,087	5,094,850	916	464	1.00
◆Woodbridge.....	2,243	753	49,521	4,223,868	691	(548)	1.17
◆Woodstock.....	19,458	6,692	409,383	34,395,558	6,193	463	1.19
Woodville.....	409	186	8,196	523,205	149	293	1.57
◆Wyoming.....	843	324	9,337	693,120	294	196	1.35
◆York Twp.....	123,555	39,725	2,005,268	210,947,435	38,132	461	0.95
Zurich.....	624	297	13,556	914,500	237	322	1.48

- ◆ New municipal resale rate structure
- ◆ and with small commercial customers transferred to domestic billing

† Local system

\* Excluding summer population

\*\* Small commercial customers transferred to domestic billing

§ Estimated

‡ Excludes revenue and kwh from the sale of power to Ontario Hydro

**Utilities and Local Systems  
AND CONSUMPTION  
December 31, 1959**

COMMERCIAL SERVICE (including flat-rate water-heaters)					POWER SERVICE					
Revenue	Consumption	Cus- tomers	Monthly consumption per customer	Av- erage cost per kwh	Revenue	Consumption	Cus- tomers	Average of cus- tomers' monthly loads billed	Monthly consumption per customer	Av- erage cost per kwh
\$	kwh	No.	kwh	¢	\$	kwh	No.	kw	kwh	¢
5,692	170,658	23	618	3.34	835	40,600	2	22	1,692	2.06
154,977	10,032,310	632	1,323	1.54	365,179	39,199,998	133	10,658	24,561	0.93
5,881	293,732	53	462	2.00	2,560	116,710	7	81	1,389	2.19
3,433	211,829	20	883	1.62	4,328	237,930	20	187	991	1.82
43,617	2,262,123	121	(1,337)	1.93	29,721	3,482,171	10	698	29,018	0.85
8,935	452,435	35	1,077	1.97	26,037	1,869,715	11	643	14,165	1.39
129,060	8,613,020	345	2,080	1.50	156,257	16,086,789	77	4,800	17,410	0.97
6,245	394,280	27	(1,095)	1.58	49	790	1	3	66	6.14
18,246	864,010	79	911	2.11	16,959	818,880	16	483	4,265	2.07
74,501	4,665,613	316	(1,018)	1.60	235,759	27,133,964	53	6,680	42,663	0.87
12,395	585,111	13	3,751	2.12	5,328	349,320	1	72	29,110	1.53
15,823	1,055,898	63	1,397	1.50	10,821	719,288	16	377	3,746	1.50
3,736	257,246	38	564	1.45	257	15,590	1	6	1,299	1.65
14,431	906,038	96	786	1.59	18,965	1,990,090	10	472	16,584	0.95
2,797	183,940	12	1,277	1.52	.....	.....	.....	.....	.....	.....
811,667	61,845,874	2,067	2,493	1.31	1,891,884	173,880,134	747	63,933	19,398	1.09
19,448	1,234,686	82	1,255	1.58	36,135	2,624,289	34	1,286	6,432	1.38
19,583	1,051,592	46	(923)	1.86	35,688	3,084,760	16	1,033	16,066	1.16
135,269	9,307,568	361	2,149	1.45	386,611	40,988,936	138	11,456	24,752	0.94
3,516	141,688	35	337	2.48	1,258	46,060	2	36	1,919	2.73
4,291	273,250	24	949	1.57	7,251	327,075	6	263	4,543	2.22
450,569	35,702,482	1,113	2,673	1.26	623,118	66,717,082	480	21,854	11,583	0.93
8,782	354,416	57	518	2.48	870	41,330	3	26	1,148	2.10

**NOTES**

The figures shown in brackets under the heading "Monthly consumption per customer" have been estimated to allow for the transfer of small commercial customers to domestic service during 1959.

In Forest Hill and Scarborough Twp. further complications resulted from the transfer of power customers to commercial service and the average consumption per customer figures have therefore been omitted.

## LIST OF ABBREVIATIONS

A.F.L. —American Federation of Labour  
 bhp —brake horsepower  
 cfs —cubic feet per second  
 C.I.O. —Congress of Industrial  
       Organizations  
 C.L.C. —Canadian Labour Congress  
 G.S. —Generating Station  
 hp —horsepower  
 Jct. —Junction  
 kv —kilovolt(s)  
 kva —kilovolt-ampere(s)  
 kvar —kilovar(s)  
 kw —kilowatt(s)

kwh —kilowatt-hour(s)  
 M.E.U. —Municipal Electrical Utilities  
 min —minimum  
       —minute (20-min)  
 N.O.P. —Northern Ontario Properties  
 NPD —Nuclear Power Demonstration  
 R.O.A. —Rural Operating Area  
 rpm —revolutions per minute  
 S.O.S. —Southern Ontario System  
 S.S. —Switching Station  
 T.S. —Transformer Station  
 Twp. —Township  
 V.A. —Voted Area

## INDEX

In the index all page references to tables or graphs are in italic type figures. The code letters refer to statements in the text as follows:

*A* = Statements "A" and "B"—Financial Statements of the Municipal Electrical Utilities  
*C* = Statement "C"—Rates and Typical Bills for Electrical Service in Municipal Electrical Utilities and Local Systems  
*D* = Statement "D"—Customers, Revenue, and Consumption in Municipal Electrical Utilities and Local Systems  
*L* = Statement of Loads of Municipal Electrical Utilities and Local Systems  
*P* = Statement of the Allocation of the Cost of Primary Power  
*S* = Statement of Sinking Fund Equity

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